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BLACK SEA RAILWAY
AND FREE PORT

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THE DANUBE AND THE BLACK SEA:

MEMOIR

ON THEIR JUNCTION BY A RAILWAY

BETWEEN

TCHERNAVODA AND A FREE PORT AT KUSTENDJIE:

WITH

REMARKS ON THE NAVIGATION OF THE DANUBE, THE DANUBIAN PROVINCES,
THE CORN TRADE, THE ANCIENT AND PRESENT COMMERCE OF THE
EUXINE; AND NOTICES OF HISTORY, ANTIQUITIES, &c.

BY

THOMAS FORESTER, Esq.

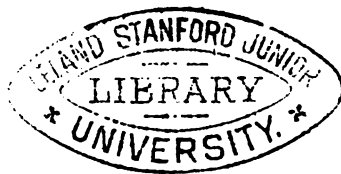
AUTHOR OF "NORWAY IN 1848-1849," ETC. ETC. ETC.

LONDON:

EDWARD STANFORD, 6, CHARING CROSS.

1857.

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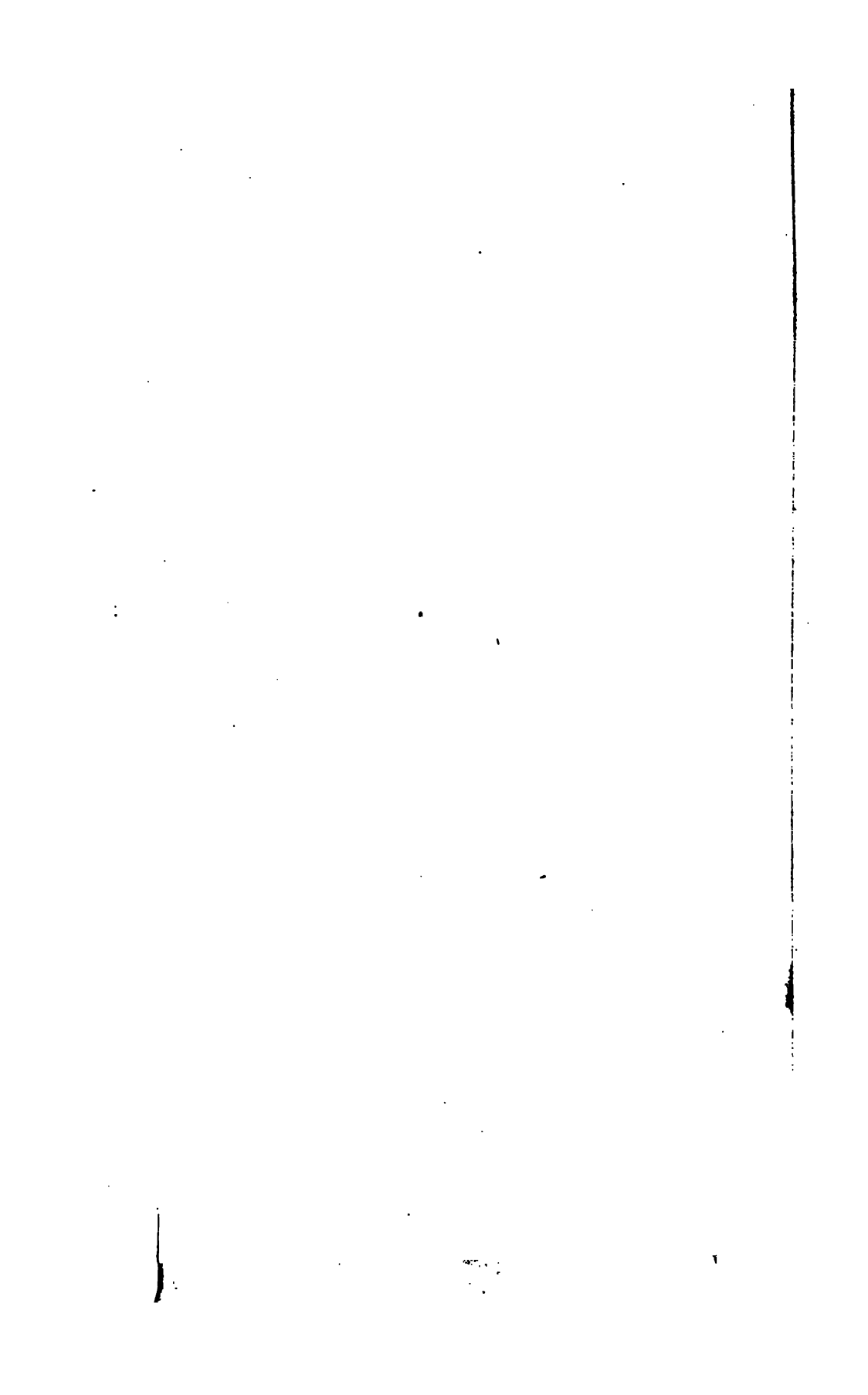
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DANUBE AND BLACK SEA

RAILWAY AND HARBOUR.

SECTION I.

PRELIMINARY REMARKS.—*The late War.—Results of the Treaty of Paris.—Danubian Principalities.—Mouths of the Danube.—Commission for clearing them.—Its difficulties.—Proposed Port and Railway.—Their feasibility.—Advantages to Commerce and Civilization.—Plan of the Memoir.*

By a law of compensation in the wise order of Providence, the hurricane of war, like the tempest and the thunderstorm, clears the atmosphere; and, while sweeping the earth with desolation, prepares it for fresh processes of culture and improvement. The clouds dispersed, halcyon days succeed, which, turned to profit, afford new scope for industrial pursuits.

If this be true, generally, the remark may be hopefully applied, with more than usual force, to the war in which the great Western States lately engaged without any ambitious designs, with no view to territorial extension, but solely in the

The late
War.

interests of civilization and progress, to interpose a barrier against a Power instinctively antagonistic to these principles.

The contest has been recently brought to a happy conclusion ; for, whatever opinions may be entertained regarding the conduct of the war, the share of its renown which has fallen to our lot, or the possible results to be obtained by a continuance of hostilities, all parties are agreed in accepting the terms on which peace has been restored as fulfilling the main objects for which the war was undertaken.

Treaty of
Paris.

We find the bases of that civilizing and industrial progress of which we have spoken soundly laid by the Treaty of Paris (1856). Such are the provisions which, in effect, convert the Euxine into a neutral sea ;—those vindicating the right of the free navigation of the Danube, and securing it by a cession of frontier on its left bank ;—the measures adopted for establishing a better system of government in the fertile provinces watered by that noble river, and thus developing their abundant resources ;—and the guarantee of independence which, combined with internal reforms, can alone give renewed vitality to the Ottoman Empire.

Results of
the Peace.

A new era commences from the ratification of the Treaty of Paris ; and the security it promises gives an opening to fresh channels for commercial enterprise, to a wide field for engineering skill. Among the projects, more or less feasible, to

which these opening prospects have given rise—banks, harbours, railways, and lines of telegraphic communication — few, perhaps, are of greater importance than those more immediately connected with the Danubian Principalities and the province of Bulgaria.

These territories, so long, in successive wars, the battle-field of hostile powers, rendered stagnant under the incubus of Turkish misrule, or shattered by Russian intrigues and encroachments, possess, in a fertile soil and generally industrious population, resources rendering them worthy of the interest with which Western Europe regards their social progress and the development of their commercial relations. Even weighed down, as they have hitherto been, by internal and external pressure, the Danubian Provinces have made rapid strides in that direction, and contributed largely to the supplies of corn drawn from the ports of the Black Sea.

Under these circumstances, it is of the last importance that proper outlets be provided, without delay, for the increasing produce of these fine countries. Every one knows that the Danube, with its tributaries, has hitherto been the only channel by which this produce, collected in the interior, has been conveyed to the seaboard. But it is equally notorious that the Mouths of this river are so filled up, and take courses so circuitous and contracted for nearly one hundred miles above its embouchure, that the navigation is attended

Danubian
Principalities.

Mouths
of the
Danube.

with the greatest difficulty and danger. Being only practicable by vessels of small tonnage, there can be no direct commerce on a large scale with the maritime nations of the west of Europe, and even the Austrian trade is much obstructed.

Danubian
Commis-
sion.

This is a matter of such vast importance that it has been made a European question; and we find, among the articles of the Treaty of Paris, a provision for the appointment of Commissioners, named by the contracting Powers, to whom is assigned the duty of planning and executing the works required for clearing the Mouths of the Danube, and the bars at their entrance, from the sands which obstruct them, in order that they may be put in the best possible state for navigation.

Such an undertaking must be encompassed with difficulties; and it is well observed, in a Report to which reference will often be made in this Memoir, that “the decisions of a congress “as to what shall be done to improve the navigation through the delta of a great river, in “the territory of a foreign country, and out “to sea, and the practical execution of their “decision, are widely different matters.” *

The present state of these channels of the Danube—in reference especially to the trade of Wallachia and Moldavia—as well as the possible operations of the Danubian Commissioners, will

* Messrs. Liddell and Gordon’s Report on the Proposed Railway between the Danube and the Black Sea, and the Free Port of Kustendjie, p. 5.

necessarily demand an examination in some detail, as the basis on which further observations will be founded. In their present stage we only glance at the difficulties of the navigation, and of the task imposed on the Commissioners for its improvement.

Meanwhile, ere their operations are set in motion, or even originated, private enterprise—the source of almost all great public works in this country, in accordance with the genius of the people and the character of the government—steps in and offers a solution of the difficulty.

“The substitution of land-carriage for water-
 carriage, or, rather, the substitution of overland
 “cuts for long sea circuits,” observed the able
 writer of a leading article in the *Times** on the
 Euphrates Valley Railway, “is the one simple
 “principle of the present undertaking;” and,
 changing the expression “long sea circuits” for
 “a long circuitous river navigation,” the remark
 equally applies to the plan proposed for creating
 an outlet for the trade of the Danubian Provinces.

For it is obvious that if a point be found in the
 river’s course at which the produce of the country
 can be concentrated, with sufficient facilities, far
 above the impediments to the river navigation,
 and two hundred miles from its mouths,—and if
 that point should happen to be at a bend of the
 Danube where the stream makes its nearest

* Quoted by Mr. Andrew in his *Memoir on the Euphrates-Valley Route to India*, p. 179.

approach to the sea before it becomes involved in these difficulties,—and if the station on the Danube can be connected with a good seaport by a railway less than forty miles long, and of easy construction,—we have the means of carrying out the principle of “a short cut” and “overland carriage” most effectively. And not only so, but such a harbour at the terminus is what the Commissioners can never construct at the mouth of the Danube, even if it lay within the scope of their powers to undertake the enterprise.

Port and
Railway
feasible.

Now, a glance at any map of the country lying between the Black Sea and the Danube will show that the conditions stated are met, on the one hand, by the harbour of Kustendjie, an ancient and still frequented roadstead, situated about thirty leagues south of the Sulina Mouth,—and, on the other, by the town of Tchernavoda, near Rassova, on the Danube; with a railway connecting the two points, and following, for the most part, the margin of the Karasu lakes.

Thus would be carried out, in the spirit, if not in the letter, the resolutions of the great European Powers, having for their object the bringing to the seaboard the trade of the Moldo-Wallachian and other provinces, of which the Danube is the channel, with safety and expedition. Thus, virtually, a new Mouth of the Danube would be created.

Proposed
Works
on the
Danube.

It is by no means intended to assert that this plan supersedes the works entrusted to the Com-

missioners of the Allied Powers:—it may be subsidiary to them. For should even difficulties attending the improvement of the river navigation, and clearing the bars at its entrance, not prove insurmountable, and the governments should consider themselves pledged to carry out their resolutions, *coute que coute*, the importance of having at hand such a harbour of refuge as Kustendjie can easily be made—even after the river is opened—cannot be overrated. Their difficulties.

The enormous expense, also, of the works required for opening the navigation of the Danube, and of keeping it open, which must become a charge on the trade in the shape of dues, as well as the delays attending operations of such magnitude and difficulty, render a shorter and less expensive plan highly desirable. The whole cost of such improvements of the port of Kustendjie as will meet the demands of a large trade, with the construction of the railway and a station and basin on the Danube, will not amount to one-fourth of the estimated expense of the works proposed on the St. George and Sulina, as estimated by Austrian engineers; and the port and railway can be opened for traffic in the course of two years; while it may be easily conceived that works such as those contemplated at the Mouths of the Danube, may, under a government commission, be extended over a period thrice as long.

In such undertakings, private enterprise, when well founded, possesses great advantages; and Private enterprise.

Preliminary
Surveys, &c.

this is no scheme of the moment, hastily concocted, and put forth on speculation by needy adventurers on imperfect information, reckless as to consequences, so that a specious representation attracts public support. The plan has been long considered, and is well matured. Some account of the progressive steps by which it has been brought to this stage will be given in the following pages. Suffice it to say, at present, that, after preliminary surveys and repeated examinations by highly competent persons, regular plans and sections of the line of railway have been completed, soundings of the harbour of Kustendjie taken, the moles, breakwaters, quays, buildings—all that is necessary for an extended commerce—planned on the spot; and detailed estimates carefully made of the whole cost of the port and railway.

In forming their plans, the civil engineers have had the friendly advice and assistance of distinguished officers in Her Majesty's service, conversant with the country, and the nature of whose professional duties made them valuable co-operators. They have gone over the ground and examined the seaboard; and the statistics of the trade of the Danubian Provinces, on which the estimate of profit mainly depends, have been carefully collected from public documents and personal inquiries.

It need only be added that two-thirds of the required capital have been subscribed by a limited number of persons in this country, the remaining

shares being reserved, in virtue of an article in the Concession, for subjects of the Sublime Porte. The subscribers, after cautiously examining the feasibility of the project, have not hesitated to embark in it, without any guarantee of interest from the Turkish government. They have constituted themselves a Company, under the title of "The Danube and Black Sea Railway and Free Port of Kustendjie Company," for carrying it out; and having obtained a Concession from the Porte, printed in the Appendix to this Memoir, the Directors are making arrangements for immediately commencing the works.

Thus the projectors of this undertaking are in a position to reap the first-fruits of the advantages secured by the successful termination of a war which has cost so much blood and treasure. It will devolve on them virtually to carry into effect one of the most important provisions of the Treaty of Paris, and thus be the harbingers of that civilization, and those material benefits, which, it may be hoped, a freer intercourse and more extended commerce with the nations of Western Europe, may introduce among the well-disposed and industrious inhabitants of the countries bordering on the Danube and the Black Sea.

With these preliminary remarks, we now proceed to examine in detail the nature and practicability of the undertaking in which the Company have embarked, and its commercial value. We may also draw attention to the strategical importance

First-fruits of the Treaty of Paris.

Objects of the Memoir.

which must attach to such a place and harbour as Kustendjie, should the Turkish government eventually provide for their fortification. Nor will it be foreign to the purpose if we glance historically at the ancient condition of the countries bordering on the Danube and the Black Sea; for if we find that, from very early times, these provinces have been highly productive, and the ports of the Euxine seats of an active commerce—the Greeks, the Romans, and the Genoese successively reaping a rich harvest from their various products—and that this prosperity has only been interrupted by ages of war and misrule,—we may more readily come to the conclusion that, with settled order, and the introduction of the appliances of modern art, these countries may again become the abodes of an industrious and thriving people, and the Bulgarian shepherd and Wallachian husbandman be eager to exchange the fruits of their labours for the manufactures and other commodities which advancing civilization will lead them to covet.

Civiliza-
tion.

We have reason also to believe that the promoters of this undertaking entertain large and philanthropic views of the benefits which may be conferred by their enterprise on countries long sunk in sloth and ignorance, but now ripe for the harvest. Not only is it possible to combine commercial enterprise with material, moral, and social improvement, without departing from its legitimate objects, but they go hand-in-hand.

By this union only we may hope that the degraded races of Africa will one day be brought within the pale of civilization ; and the benefits to be conferred, as well as reaped, by opening new and direct communications with fertile regions inhabited by old historic races long fallen to decay, are made prominent features, in their claims to support, by the advocates of the Euphrates Valley Railway. A public writer, quoted by Mr. Andrew in his valuable Memoir on that undertaking, says :

“ What a field is here opening to the Christian philanthropist ! To aid in the removal of ignorance and superstition by the diffusion of useful knowledge and an enlightened religion, to plant industry and the arts where indolence and barbarism have hitherto prevailed, are noble efforts, calculated to elevate and bless alike those who give and those who receive. The opening of the central regions of Western Asia, and of a new and easy line of communication between the East and the West, would obviously subserve the promotion of such objects, and therefore has a claim upon the sympathy and support of every one taking an interest in the advance of nations in prosperity, civilization, and happiness.”*

The remark is equally applicable to the sphere embraced by the proposed operations of the Danube and Black Sea Railway and Free Port

* *Memoir on the Euphrates Valley Railway*, p. 123.

of Kustendjie Company, a project only second in importance to that of its great contemporary. "The railway and telegraph," observes Mr. Andrew, "are not only of incalculable value as "political instruments, " but they are pioneers of "enlightenment and advancement. It is theirs "to span the gulf which separates barbarism "from civilization; and his is an enviable lot by "whose exertions the arts and industry, the "capital and enterprise, the knowledge and "humanity of Western Europe shall be familiarized and brought home to the dwellers in "the East."*

* *Memoir on the Euphrates Valley Railway*, p. 162.

SECTION II.

MOUTHS OF THE DANUBE.—*Its course traced down from Rust-chuck to the Sea.—Report of Captain Spratt, R.N.—Difficulties of the Navigation—and of the operations proposed for clearing the Mouths.*

THE Danube—that “noble artery of central Europe”—is the natural link of its commerce and intercourse with the countries lying on the shores of the Black Sea, and the channel for conveying the produce of the fertile districts it traverses to ports from which it may be shipped for the Mediterranean and the Atlantic. The navigation begins at Ulm, which is made a *depôt* of goods from France, Germany, the banks of the Rhine, and Switzerland, for transmission to the Moldo-Wallachian Provinces and other parts of the Turkish dominions both European and Asiatic.

During its course, the Danube passes through four (formerly five) political divisions, and receives the waters of thirty navigable rivers, and ninety lesser streams. With this continued augmentation of its strong current, after a course of 1,547 miles, the river flows into the Black Sea through several channels, into which it branches on becoming entangled with its vast delta; and such is the volume of water it discharges, that the addition is said to be perceptible at the distance of fifty miles from its mouths.*

* Wilson's *Lowlands of the Danube*, p. 63. Dr. Clarke says: “Having passed the Isle of Serpents, we fell in with the current

The Lower
Danube.

Our immediate object requires no further notice of the traffic of which the Danube is the channel in its earlier course ; though that, from whatever point of the stream it may be brought down, will naturally find its way to the sea by the most convenient outlet. Our main business is with the Lower Danube, anciently called the Ister, and long the boundary of the Roman empire on its north-eastern frontier. The genius and intrepidity of the Emperor Trajan led him to span its mighty stream by a bridge, considered, at that time, a gigantic engineering enterprise ; and, after a series of bloody campaigns, made him conqueror of the kingdom of Dacia, occupying the territory on the left bank of the river. Reduced into the form of a Roman province, it included the present Principalities of Wallachia and Moldavia, which, with an angle of the Russian province of Bessarabia, lately ceded to Turkey, are divided by the river from Bulgaria, an integral part of the Turkish empire. So that, now, both banks of

“ of the Danube. So great is the extent over which the waters “ diffuse themselves, from the shallowness of the sea, that, “ although the discharge is scarcely adequate to our notions of so “ considerable a river, the effect is visible for several leagues by “ the white colour communicated. Dipping buckets in the “ waves, we observed that the water was almost sweet at the “ distance of three leagues from the mouth of the river, and “ within one league it was perfectly fit for use on board. The “ shore is very flat all the way from Odessa to the Danube, and “ so low near the river’s mouth, that no other object appears to “ those who approach the shore than tall reeds rising out of the “ water, or the masts of vessels lying in the river.”—*Travels*, vol. i. p. 652.

the Lower Danube, through its whole course from Kladova, on the confines of Austria, to its embouchure, are subject to the rule, or at least under the suzerainty, of the Ottoman Porte.

It will sufficiently serve our purpose shortly to trace its course towards the sea starting from Rustchuck, and availing ourselves, in the first instance, of such notices of intermediate points as we find in one of Captain Spencer's valuable works.

"On leaving Sestos," he says, "the Danube ^{Danube at Rustchuck.} continues to expand, till by the time we got to Rustchuck it was at least a league in breadth. This town, one of the most important Turkish military positions on the Lower Danube, has a strongly fortified castle which completely commands the river and the only pass in this direction to the Balkan, that called Granova; serving, at the same time, as a *tête du pont* in front of Giurgevo,* a large Wallachian town on the other side of the river.

"Rustchuck contains a population of about 50,000 besides its garrison, which is always considerable; and, like most of the towns belonging to Turkey on the Danube, has suf-

* "Rustchuck is the chief town of Bulgaria. Giurgivo, on the opposite shore of the Danube, is a place of some importance as the port of Bucharest, but difficult of entry. This seems common to all places on the Wallachian bank, they being generally situated up some tributary stream, or on branches of the main river." — Lieut.-Col. Biddulph's *MS. Notes on the Danube, &c.*

“fered repeatedly from the predatory wars of
“the Russians, particularly in 1825.

Danube
below
Rustchuck

“On leaving Rustchuck, the Danube, which
“had hitherto flowed on in a regular continued
“channel, now divided itself into a number of
“streams, inundating the country for miles on
“the Wallachian side of the river, where there
“was nothing to be seen but patches of low,
“marshy soil, pools of stagnant water, and small
“islets overgrown with reeds and bulrushes; *
“whereas the Turkish side of the river in Bulgaria
“still continued to present the same bold out-
“line, even rising up in some places to the height
“of a little mountain, and, wherever danger
“might be apprehended, bristling with cannon.

Silistria.

“We now arrived at Silistria, which may be
“termed, from the great extent and strength of its
“fortifications, the citadel of the Danube, form-
“ing as it does, with Rustchuck and Shumla,
“a connected triangle, which must be broken
“before any enemy could attempt the passage
“of the Balkan in this direction with safety.

“Silistria contains a population of about
“20,000, and appears altogether to be one of
“the most prosperous and commercial places

* The river may have been in flood when Captain Spencer descended it. The Wallachian flats are not “marshy.” “Even the islands which lie outside the ‘terra firma’ of the Wallachian bank, although sometimes called marshy, seem to be pretty solid. They are covered with willow trees, and at times the water sweeps over them and the adjoining banks.”—Colonel Biddulph's *MS. Notes*.

“ on the Danube, if we might judge from the
 “ neatness of the houses, the well-supplied mar-
 “ kets, and shops amply furnished with what-
 “ ever could conduce to comfort or luxury; to
 “ which we may add, there were a number of
 “ vessels loading and unloading their cargoes in
 “ the harbour.

“ After leaving Silistria, the Danube again
 “ divides into several streams: the Bulgarian
 “ hills had also completely melted into a mo-
 “ notonous plain; and now we passed onward
 “ through an immense expanse of water, more
 “ resembling a sea studded with innumerable
 “ islets than a river; and this continued till
 “ we got to Rassova, a small fortified town ^{Rassova.}
 “ defended in front by an impassable marsh.

“ The next place we stopped at is the little ^{Tchernavoda.}
 “ port of Tchernavoda, where the steam-boat
 “ passenger may land if he desires to avoid the
 “ malaria of the marshes, and the mosquitoes;
 “ and continue his journey by land to Kustendjie
 “ on the Black Sea, by which he will escape a
 “ long and tedious voyage through the Sulina
 “ channel, the only navigable outlet of the
 “ Danube.

“ But to continue our voyage. At Rassova,
 “ the mighty stream once more leaves its bed,
 “ and scatters its waters over an immense dis-
 “ trict, forming here and there stagnant pools,
 “ and breaking up the land into tiny islets, the
 “ whole overgrown with reeds and sedgy grass,

“ the home of malaria, mosquitoes, and every
 “ poisonous insect.*

Hirsova. “ At length we came to Hirsova, a species of
 “ oasis in the desert, prettily situated on an un-
 “ dulating eminence, with a fortified castle, and
 “ a large garrison ; its chief importance arising
 “ from the circumstance that it covers every
 “ point in this direction where an enemy might
 “ attempt to effect a landing in that rectangular
 “ peninsula called the Dobrudscha.

Brailow. “ The next fortified place we came to on the
 “ Turkish side of the river was Matschin, rather
 “ important for lying almost opposite to Brailow,
 “ a large town in Wallachia ; it protects, in con-
 “ junction with Hirsova, the passage of the
 “ Danube and the route by land to Varna and
 “ Shumla.

Galatz. “ Shortly after leaving Brailow, we passed the
 “ river Sereth, which forms the boundary between
 “ Moldavia and Wallachia : here the river again
 “ unites into one undivided stream, and we are
 “ rapidly carried forward to Galatz,† the only
 “ port Moldavia has on the Danube. After
 “ passing this town, the river again divides into
 “ several streams, and so continues till we come
 “ to the little town of Reni on the Pruth, when

* This description rather applies to the marshes of the Delta, many miles lower down the course of the river. The neighbourhood of Rassova, with all the Dobrudscha, is healthy, and has for the most part a dry, sound soil. See afterwards, Section vii.

† Further particulars of Galatz, as well as Brailow, Ibraila, will be found in subsequent Sections.

“ we enter the territory of Russia.* Somewhat
 “ lower down is Kortal, opposite the Turkish
 “ town of Isaktchi, the most ominous spot on ^{Isaktchi.}
 “ the Lower Danube to the Turks; for here, in
 “ days of yore, the Russians were accustomed to
 “ throw across their bridge of boats when they
 “ desired to carry fire and sword into the land of
 “ the Infidel. Most truly, the locality is remark-
 “ ably well adapted for crossing, owing to the
 “ contracted bed of the river, and the number of
 “ shallow streams and islets with which this
 “ district abounds.

“ From hence there are six outlets or channels ^{Mouths}
 “ to the Black Sea; of these, only one is navi- ^{of the}
 “ gable, and this, owing to the wilful negligence ^{Danube.}
 “ of Russia in allowing the sand to accumulate at
 “ its mouth, is now nearly impassable, except for
 “ vessels of light burthen. This has been done
 “ expressly to destroy the navigation of the
 “ most important river in Europe; and yet
 “ Europe continues to look on with the most
 “ laudable degree of patience!”†

Ancient writers count different numbers of
 mouths to the Danube, varying from five to seven.
 Arrowsmith makes them four.‡ Mr. Thomas

* It is scarcely necessary to remark that this is part of the
 territory ceded by Russia under the Treaty of Paris.

† Spencer's *Turkey, Russia, the Black Sea, and Circassia*,
 pp. 84-89.

‡ Arrian, in his *Periplus*, makes them five; Pliny, with whom
 Ptolemy agrees, six; Strabo, seven. The ancient Greek names
 given by Pliny, with which those we find in Ptolemy nearly coin-

Increase
of the
Delta.

Captain
Spratt's
Report.

Wilson, in his observations "On the Lowlands of the Danube," on the authority, we believe, of modern maps, makes them at present five—the *Kilia*; the *Sulina*; the *Kedrilo* (Edrillis), or St. George; the *Islowa*, or Jalova; and the *Portitsa*; of which, he says, the two latter are navigable, as well as the *Kilia*, the *Sulina*, and the St. George. As to the difference in the number of the Mouths of the Danube appearing on these statements, it may be easily conceived that it arises from the shifting of the loose diluvial soil forming the delta; old channels being filled up by the deposits, and new ones opened by the force of the current. The deposits are so vast that Captain Spratt, R.N., C.B., lately employed in the survey of this coast, has stated, on calculations founded upon the Russian Survey of 1826-27, that, if the correctness of the Russian chart can be depended on, the advance of the delta has been, in parts, as much as two miles in thirty years.

Having the advantage of reference to the able Report of this officer on the Mouths of the Danube, lately printed by order of the Admiralty, we propose to state the general results of Captain Spratt's survey, and shall take the liberty of

cide, are, beginning from the north,—1. *Peuco-Stoma*, from Πεύκος, "a pine-tree," woods of which flourish on the shores of the Black Sea; 2. *Naraku-Stoma*; 3. *Kalon-Stoma*; 4. *Pseudo-Stoma*; 5. *Boreon-Stoma*; 6. *Spirio* (*steno* or *psilo*)-*Stoma*: signifying the Stagnant? "mouth" (*stoma*); the Fair; the False; the Northern; and the Crooked? or Narrow. The *seventh* mouth was said to be "a great marsh."

making a few extracts of passages bearing on subjects more immediately connected with the object of our Memoir.

The survey extends to the St. George, the Sulina, and the Kilia Mouths. We may dismiss any particular reference to the Kilia, as it only has from 7 to $7\frac{1}{2}$ feet of water over the bar, and is not considered adapted to the improvements contemplated. Of the other branches, the St. George is the most southern, the most uniform, and the deepest, being, in fact, as the natives call it, the "mother" stream of the Danube.

The mouth of the St. George has a broad St. Geo.
Branch. shallow bank of sand lying off its southern lip, which extends for 4 miles in length, north and south, and $1\frac{1}{2}$ in breadth, over which there is a depth of from 1 to 4 feet water only. There are two channels, of which the Olinka has 12 and 15 feet water, but with a bar of 5 feet. The deeper channel, close to the northern or left bank, has at present a bar between 300 and 400 yards broad, and 600 or 800 yards in length, with only 9 and $9\frac{1}{2}$ feet of water over it. There is, however, a depth of 24 and 30 feet close to the outer edge of the bar, and the water deepens quickly to 7 and 9 fathoms. The length of the St. George branch, from its mouth to the junction with the Sulina at Chatal Point, is 55 miles, with an average width of 400 yards, and an average depth of about 5 fathoms. Its course is very tortuous, and there are several shoals.

Sulina
Branch.

The length of the Sulina branch, from the junction at Chatal to its mouth, is 46 miles. It is more tortuous than the St. George, but with longer reaches, or *tavlasses*, as they are called by the natives, than the St. George. It has more shoals and less average depth of water.

St. Geo.'s
best.

The mouth of the Sulina has no extensive banks in it like the St. George; and the bar seems to have generally an advantage of 2 feet more water over it than the St. George, there being from $10\frac{1}{2}$ to $11\frac{1}{2}$ feet in the best state of the season. The Sulina, then, has the better bar, and is shorter than the St. George by 9 miles, besides having a bank cleared of the reeds for tracking by long use; but it has a narrow entrance, and its course is more encumbered with shoals. On the whole, Captain Spratt concludes, after a careful comparison, that many points are in favour of the St. George being made the main navigating channel. He states that, "from its breadth, depth, and slower current, a vessel may complete her cargo at Galatz, so as to descend without delay to the mouth, which cannot be done in the Sulina; for a 250 or 300 ton vessel must, on arrival at Tulcha, discharge at least one-third of her cargo into lighters for the purpose, so as to enable her to cross the Algani bank near the junction with the St. George, and then proceed, in company with the lighters, to the Sulina mouth; then again, according to the state of the bar, either get

“ out one-fourth or one-third more, so as to cross
“ this last obstruction in safety, and at a cost of
“ about 20s. per ton, but often much more ; for
“ the hired vessel has to return empty to Tulcha,
“ a distance of 20 miles against the stream.

“ But if a vessel reached St. George with her
“ whole cargo, and found, as at present, a bar of
“ 9 feet only, so as to require her to get out two-
“ thirds of her cargo even to cross the bar, I
“ cannot but think that, as the distance would be
“ two miles at most between the anchorage within
“ and the roadstead without, both time, money,
“ and risk would be saved to both vessel and
“ cargo.”

The remarks on the *roadsteads* are important.

“ There is no doubt,” observes Captain Spratt, ^{The road-}
“ that the roadstead of the Sulina is the most ^{steads.}
“ exposed of all, and cannot be improved ; and
“ that the Kilia, Sulina, and St. George are also
“ dangerous in north-east and easterly gales, which
“ sometimes come on very suddenly, and without
“ barometric warning. In such gales vessels
“ anchored in the roadstead of the Sulina, or off
“ the Ochákov mouth of the Kilia, could have
“ small chance of escape ; but, under such circum-
“ stances, must trust to their anchors and cables,
“ for they could have little chance of being able
“ to weather the whole extent of coast under their
“ lee, and doubtless many would be lost. But as
“ at the roadstead of the St. George there would
“ be only $3\frac{1}{2}$ miles of shallow water to weather in

“ such a gale, a vessel, having weighed or slipped
 “ at its commencement, would have every chance
 “ of weathering the shallows before the sea had
 “ got up, and then in twenty minutes after having
 “ so weighed, would be in perfect safety, with
 “ the option of keeping at sea or running under
 “ the shelter of the St. George bank and anchor-
 “ ing there in 6 or 7 fathoms water, with only an
 “ occasional swell on her bow or beam to cause
 “ any inconvenience.

“ The prevailing winds are from N.W. to N.E.,
 “ more frequently from N. to N.N.E. Now the
 “ roadstead of the Sulina is directly exposed
 “ to these winds; whereas, by the projection of
 “ the coast between the St. George and Sulina,
 “ its trend from the former, northward, is nearly
 “ N.N.E.; so that frequently, when the bar is
 “ too rough for vessels to cross with northerly
 “ winds, or to communicate [with the shore] at
 “ the Sulina, the St. George is practicable, viz.,
 “ until the wind has veered round to N.N.E.
 “ and N.E.

Ship-
wrecks.

“ In December last, I was informed, upwards of
 “ sixty sail of vessels were suddenly caught off the
 “ Sulina by a sudden rising of a N.E. gale, which
 “ gives little reliable barometric warning; and of
 “ that sixty only the small-draught vessels were
 “ enabled to get into the river; the rest, all but
 “ three, were lost, to the number of nearly thirty.
 “ Now almost every vessel is obliged to take in
 “ part of its cargo outside of the bar; vessels of

“ 300 tons, for example, can only cross with
 “ 150 tons in them, and the bar at 11 feet. This,
 “ then, is an important point in favour of using
 “ every effort to bring the St. George mouth to
 “ the same depth as the Sulina, even supposing
 “ no greater improvement could be effected by
 “ other engineering efforts than the dredge and
 “ the rake. But I believe that a contraction of
 “ the banks by filling would be easily effected,
 “ and without much cost, and also be the pro-
 “ bable means of maintaining a depth of 13 and
 “ 14 feet, perhaps more.” In another part of his
 remarks, Captain Spratt expresses a “ hope ” that
 “ a depth of 15 or 16 feet will be obtained at one
 “ of the river’s mouths, and maintained also ;
 “ and, with this, three-fourths of the vessels
 “ trading to the Danube will be able to enter and
 “ depart without the necessity of any roadstead.”

We learn, then, on the most competent Amount of
improve-
ments. authority, that the best results to be expected
 from the operations of the Danubian Commis-
 sioners are that one or other of the river’s mouths
 may be deepened to 15 or 16 feet of water ; and
 that, even if this depth can be permanently main-
 tained, one-third of the vessels trading to the
 Danube—that is, all the larger class of ships—
 will still be unable to enter the river. If, in
 addition to this, we take into consideration the
 dangerous character of the navigation of the coast
 during the prevailing winds, and the expense
 and delay attending the river navigation, for

which tracking or steam-tugs will always be indispensable, the importance of such a port as Kustendjie, obviating the inconveniences of this circuitous and dangerous route, and capable of receiving the class of ships excluded from the Danube, must be obvious. No doubt, we think, can be entertained that the new port and railway will intercept all the traffic above Rassoia; and it would be better, in every point of view, for the merchants of Galatz and Ibraila to send their grain, drawn from Moldavia and the north-west of Wallachia, up the stream to the basin at Tchernavoda, a distance of 50 miles, than to incur the expense of sending it 100 miles, including the windings, down the river, subject to the risks and difficulties detailed, when, after all, it can only be shipped in vessels of inconsiderable tonnage. But the importance of employing good ships of large burthen in the corn-trade with Western Europe cannot be overrated. To this a sensible remark of Mr. Jacob, in a Memoir to be further quoted, closely applies:—

“Every prudent merchant,” he observes, “will, in his choice of speculations, prefer those which can most speedily be brought to their termination, and especially so when the subject of his speculation is liable to damage, as well as to quick and excessive vibrations in the markets and price.”* He points out that this is particularly the case with corn, and that it is exposed

* *Memoir on the Trade of the Black Sea*, p. 16.

to injury from damp in a low class of vessels, as well as by being conveyed in carts.

The difficulties and perils of the navigation of the Danube,* through the best of its lower channels, are thus shortly summed up by Captain Spencer:—

“Thus, between the selfish policy of Russia on one side, which seeks to ruin the commerce of Austria and Turkey on the Lower Danube, and the weakness of those powers in submitting to her dictation, the poor mariner has no other alternative than to adopt the long and tortuous Sulina channel, which, owing to the accumula-

* We are disposed to think, though the contrary has been asserted, that ice, either formed in the channels of the Danube or brought down the stream in floating masses, must in some seasons form an additional impediment to the navigation. Dr. Clarke (*Travels*, vol. i. p. 643), observing on the extraordinary fluctuations of the temperature in those latitudes, states that Captain Berganini informed him that his ship was once detained five months at the mouth of the Danube by the river being frozen over. Ovid, during his banishment on that coast, had witnessed a similar occurrence. His description possesses admirable force and beauty, of which our impromptu version can give but a faint idea:—

“Vidimus ingentem glacie consistere pontum,
Lubricaque immotas testa premebat aquas.
Nec vidisse sat est. Durum calcavimus æquor;
Undaque non udo sub pede summa fuit.”

Tristia.

’Twas strange to see the mighty Ister’s stream
Icebound, and shells upon its surface gleam;
’Twas stranger still to tread the solid floor,
And dry-shod cross the gulf from shore to shore.

This very year, it was reported that the Commissioners for settling the Principalities were prevented by ice from sailing up the Danube, and obliged to go round by Odessa.

“ tion of sand at the bar, can only receive ves-
 “ sels of 100 tons burthen. Besides, if he should
 “ be fortunate enough to escape being ship-
 “ wrecked on some of the numerous sandbanks
 “ that obstruct his passage, he is almost certain
 “ to carry with him the seeds of an intermittent
 “ fever that will never leave him.” *

It would be waste of time to pursue the subject, which is finally disposed of in the Report of Messrs. Liddell and Gordon, founded on all the information that could be obtained, as well as on personal investigation; and which has now been officially confirmed by the publication of Captain Spratt's Survey.

Liddell &
 Gordon's
 Report.

The Report states: “ On careful consideration
 “ of the subject, Mr. Gordon having passed
 “ through the localities, having seen the Sulina
 “ Channel and crossed the bar, having interro-
 “ gated the captains of Austrian and English
 “ vessels, and studied Captain T. Spratt's new
 “ charts of the Sulina and St. George, with the
 “ advantage of personal discussion with that dis-
 “ tinguished officer, it becomes a question in our
 “ minds whether any entrance to the Danube and
 “ the channel upwards can be permanently im-
 “ proved, so as to admit of the trade of Galatz
 “ and Ibraila being carried on in vessels of 800
 “ to 1000 tons register—and therefore drawing
 “ 14 to 17 feet, and requiring an established
 “ depth on the bar of 20 feet at least—excepting

* Spencer's *Turkey, Russia, &c.*, p. 87.

“ at such an expenditure as would render the undertaking commercially unadvisable.

“ The estimates by Austrian engineers for works on the St. George and Sulina, intended to ensure a depth of 14 feet, are, we believe, about 800,000*l.*, with an annual expenditure for extensions and repairs of 14,000*l.* To carry these works to the 20-feet line would more than triple the expense, and involve increased annual expenditure, and the only effect of the works proposed would be to improve *the entrance* to the river. The difficulties of the navigation through the delta would remain nearly the same, and these can only be ameliorated by an efficient establishment of steam-tugs. The dangerous navigation of the Black Sea, in the region round about the mouths of the Danube, will remain as prejudicial to trade as ever. The ice and floods in the river and on the coast, the fogs prevailing for so long a period, and the shoal lee-shore, must ever be impediments beyond the reach of engineering works. And yet there is no doubt that the expenditure of even the largest of these sums could be supported by a rate not too onerous to the vast trade of the Danubian Provinces, and that the trade would increase so as to support still further expenditure *if there were no other outlet for the grain for shipment in sea-going vessels, more convenient to be opened.*

“ But supposing that these works were to be Time required.

“ undertaken in the spirit suggested by the clause
 “ of the Treaty of Paris above quoted, the time
 “ required for completion of the works proposed,
 “ and necessary to obtain 14 feet water, cannot
 “ be less than eight or ten years; and to obtain
 “ the greater depth probably double that time:
 “ for they will have to be carried out under every
 “ disadvantage of situation in a country which,
 “ for a part of the year, is under water, and is so
 “ low and damp as to be almost uninhabitable,—
 “ in which ague and fever will decimate the
 “ workmen, and the unhealthiness of which would
 “ at all times tell severely against trade with a
 “ port to be established at Sulina or St. George;
 “ —and a port at one of these entrances is con-
 “ sidered essential by those who look to the Danube
 “ continuing the main channel for export as it
 “ has been hitherto.

A Port still
 wanted.

“ Moreover, the smaller extent of improvement
 “ above alluded to would not dispense with the
 “ necessity of seeking somewhere else a harbour
 “ capable of receiving vessels of 1000 tons bur-
 “ then; and for this there can be no place found
 “ so well suited to the purpose as the anchorage
 “ of Kustendjie; and this port would have the ad-
 “ ditional advantage—an invaluable one in itself—
 “ of serving as a harbour of refuge for vessels
 “ bound for the Danube itself.

“ For what is now urgently called for is some
 “ plan which can be quickly and cheaply executed,
 “ and by which the trade of the Danubian Pro-

“vinces may be saved the expenses of the passage
“of the delta and mouths of the Danube, and be
“transferred to sea-going vessels in a safe and
“commodious port in the Black Sea.”

Having considered the proposed improvements in the Mouths of the Danube, the way is now clear for our examining the capabilities of the port of Kustendjie, and the railway connecting it with the river, to meet the wants so urgently pressing. But before we proceed, it may not be amiss—and this is a fitting place—to notice a little island lying off the mouths of the river, commonly known as *Serpent Island*, which had a curious history in ancient times, and has recently acquired a fresh celebrity. It will form the subject of a short Section.

SECTION III.

SERPENT ISLAND.—*Ancient history and superstitions.—Described by Dr. Clarke—by Captain Spratt, R.N.—Physical character.—Lighthouse.—The rendezvous of the Crimean Expedition.—Re-occupied by the Turks.—Russian chicanery defeated.*

Modern name of the Island.	THE small island of Fido-nisi,* or Serpent Island, is situated about 24 miles E. by N. off the Sulina mouth of the Danube. “Nature seems to have
Position and size.	“placed it there,” observes Captain Spratt, “to be “a beacon or shield for the approach of this great “European river, the delta of which has a sea- “coast of more than 50 miles in extent, and “nowhere 2 feet above the sea.” The island, as
Lighthouse.	every one knows, has a lighthouse upon it for the direction of vessels navigating the coast, and especially those making for the Mouths of the Danube. It is about one mile in circumference, and surrounded for the most part by precipitous cliffs from 60 to 100 feet in height, with deep water near them.
Ancient names.	In ancient times this island had a variety of names, among which the most common was that of <i>Leuce</i> , or the White Island. It was so called in consequence of the white appearance caused by the swarm of sea-fowl covering it at certain seasons of the year, and thereby rendering it more visible. All the superstitions which, as we

* From ὄφις, “a serpent.”

shall presently find, attached to *Leuce*, seem to have had their main origin in its importance as a landmark; the coast near the mouths of the Danube being so low that mariners are unable to discern it, even when close in with the shore. The island itself, also obscured by the hazy atmosphere of the Black Sea, would sometimes render navigation dangerous; so that one does not wonder at the importance attached in ancient times to the white birds which rendered it conspicuous. On this account, Pindar * called it Νῆσον φαένναν, "the bright island." His commentators add, that it was called "*The White Shore* in the Euxine, where many white birds "show the island to those who sail that way." Euripides† describes it as the *White Shore of Achilles*, and calls it ΠΟΛΥΟΡΝΙΘΟΝ, from the number of its birds. Scymnus Chius also affirms that it was sacred to Achilles, and remarkable for its white birds.‡

But the most particular account of the island by any ancient writer is that given by Arrian in his *Periplus*, or voyage, round the Black Sea. It is the more valuable, because his description was written from actual observation; and we learn the extraordinary interest attached to this little island in those days from its being the only place on which he enlarges in his narrative of a voyage of one thousand miles, while barely

* Nem. Δ.

† Iphig. in Taur.

‡ Frag. 1. 46.

noticing all the other points on the coast. Arrian lived in the second century of the Christian era, and addressed his work, a sort of Report, to the Emperor Adrian, during whose reign he was Prefect of Cappadocia, and commanded the expedition.

The Isle
sacred to
Achilles.

"Sailing," he says, "out of that mouth of the Ister which is called $\psi\iota\lambda\omicron\nu$ (Pylon), with the wind *Aparctias* (from the N.) the island of Achilles appears; by some called the Course of Achilles,* and by others, from its colour, the White Island. It is related that Thetis gave this island to Achilles, and that he still inhabits it. His temple and statue, both of very ancient workmanship, are seen there. No human being dwells there: it has only a few goats, which mariners convey as votive offerings. Other offerings or sacred gifts are suspended in honour of Achilles, such as vases, rings, and precious gems. Inscriptions are also read there in the Greek and Latin tongues, in different metres, in honour of Achilles, and Patroclus who also is there worshipped."

Arrian then proceeds to relate the circumstances which had invested the spot with a sacred character in the ideas of the imaginative Greeks. After mentioning that a variety of aquatic birds, "sea-gulls, divers, and fowl innumerable," frequented the island, he sketches, in a few simple words, a picture than which, perhaps, few more

* Arrian confounded the island with the *Dromus Achillis*, a promontory of the mainland to the west of it, now called Kilburnu.

exquisite can be found in poetry. " These birds
 " alone have the care of the shrine. Every
 " morning they repair to the sea, and, dipping
 " their wings in the waves, sprinkle the temple,
 " and afterwards sweep with their plumage its
 " sacred pavement.

" It is said, also, that Achilles has appeared, in ^{Achilles}
 " time of sleep, both to those who have approached ^{appeared}
 " the coast of this island, and also to those who ^{to Mariners}
 " were sailing a short distance from it ; instruct-
 " ing them where the island was safely accessible,
 " and where the ships might best lie at anchor.
 " They even say, further, that Achilles has ap-
 " peared to them, not in time of sleep or in a
 " dream, but in a visible form, on the mast, or at
 " the extremity of the yards, in the same manner
 " as the Dioscuri ; and that, although the latter
 " appear, evidently and clearly, to persons who navi-
 " gate the sea at large, and, when so seen, foretell
 " a prosperous voyage, the figure of Achilles is
 " seen only by such as approach the island." *

* This imagination of the old Greeks, who spiritualized every object and appearance in nature, is still devoutly entertained by the watchful mariner. The luminous appearances observed in the Mediterranean playing about the masts, yards, and rigging of ships, which went formerly by the name of Castor and Pollux, are now called the fires of St. Elmo. When seen about Leuce, their mild brilliance was naturally supposed by the Greek mariner, baffled by the haze and storms of the Black Sea, to be a token of the favour of the son of Thetis, and idealized with the personal presence of the divinity to whom the island was consecrated. Thus the fires of Achilles, like those of the Dioscuri, were considered to foretell a prosperous voyage, as similar phenomena do in later times.

Other
ancient
Writers.

Many other authors, of less note indeed than Arrian, contribute to the celebrity of this remarkable island. Philostratus * gives its dimensions, stating that it is 30 stadia, or 3½ miles in length, and 4 stadia, or half a mile wide. It is also mentioned by Pausanias, † and by Ammianus Marcellinus. ‡ According to ancient poets, the souls of departed heroes enjoyed there perpetual repose and felicity. Festus Avienus, though erroneous in his account of its situation, alludes to this part of its history in the following lines :—

Abode of
the souls
of Heroes.

“Ora Borystenii quæ fluminis in mare vergunt
E regione procul spectabit culmina Leuces ;
Leuce cana jugum, Leuce sedes animarum.”

Where, to the Euxine, Dnieper rolls her flood,
Seen from afar, fair Leuce rears her crest ;
Leuce the white, where souls of heroes rest.

Dr. Clarke's
description.

Coming to modern times, we find Dr. Clarke, who passed the island in his voyage round the coast from the Crimea, giving an account of its appearance and history. “At four o'clock in the morning we were called upon deck by the captain to see the Isle of Serpents, anciently *Leuce*, lying off the mouths of the Danube, celebrated in history for the tomb and temple of Achilles. It is so small that, as we passed, we could view its whole extent. Judging by the eye, it appeared to be near a mile in length, and less than half

* In Heroicis.

† In Laconicis.

‡ Lib. xxii. c. 8.

“ a mile in breadth. It is quite bare, being only
 “ covered with a little grass and very low herbage.
 “ When carefully examined through a telescope,
 “ there did not seem to be the smallest remains
 “ of antiquity. I made a sketch of it from the
 “ south-east.* On the south side appear cliffs
 “ about fifty feet high.

“ Many absurd stories of Turkish and Russian ^{why}
 “ mariners are founded upon a notion that the ^{called the}
 “ island is covered with serpents. An oppor- ^{Isle of}
 “ tunity rarely occurs whereon ships can lie to in ^{Serpents.}
 “ order to visit it; and, if this were to happen,
 “ not a man of any of their crews would venture
 “ on shore, although there are twenty fathoms
 “ of water within a cable’s length of the island,
 “ and any vessel may sail close to it. The Rus-
 “ sians relate that four persons belonging to the
 “ crew of a ship wrecked there no sooner landed
 “ than they encountered a worse enemy than the
 “ sea, and were all devoured by serpents. Am-
 “ mianus Marcellinus records a similar supersti-
 “ tion as prevailing in his time concerning the
 “ dangers of the place.”†

We believe that the stories of the island’s
 abounding with serpents were well founded; but
 Dr. Clarke adopts, without hesitation, a fable of
 the Greek mariners that, during mists and dark
 weather, they ascertain their position off the

* An engraving of this sketch is published in Dr. Clarke’s
 Travels.

† Lib. xxv. c. 8.

mouths of the Danube by the “dolphins” * in its current out at sea being perfectly white, which is ascribed to the colouring of the river water. White dolphins are, however, seen in other parts of the Euxine.†

Remains of
Antiquity.

Dr. Clarke quotes some passages from Arrian’s account of the Isle of Serpents, adding the following remark:—“After a description so remarkable and so recent as that of Arrian, who wrote “about the second century, there is great reason “to believe some interesting remains of antiquity “might be discovered in the island. This “secluded spot escaped the ravages whereto “almost every other portion of classical history “has been exposed; neither is it known that any “traveller has ventured on the island.” ‡

* “Dolphin,” adds Dr. Clarke, in a note, “is the name given “to this fish in these seas—the *delphinus* of Pliny; but it is “perhaps nothing more than our porpoise. They are seen sporting in great numbers, generally in pairs, in the straits of the “Bosphorus.”

† The ancients imagined that the colour of animals was affected by the waters they frequented. Every traveller who has taken the road along the coast of the Adriatic towards Rome must have noticed the fine herds of cattle in the ancient Umbria, and particularly those grazing on the banks of the Clitumnus. The white cattle of the district, supposed to be impregnated with that colour by the waters of the river, were formerly considered sacred, and reserved for sacrifice on especial occasions.

“Hinc albi, Clitumne, greges, et maxima taurus
Victima, sæpe tuo perfusi flamine sacro,
Romanos ad templa Deûm duxere triumphos.”—*Georg.* II.
White herds thy milky stream, Clitumnus, quaffed,
And, victims, on thy sacred pastures fed,
Rome to her triumphs stateliest bulls have led,

See Forester’s *Suetonius*, Bohn’s edit., p. 187.

‡ *Travels*, by Dr. Clarke, vol. i. pp. 643, &c.

Annexed to Captain Spratt's Report on the Mouths of the Danube, which has reached us since the previous account of Serpent Island was written, we find some remarks on it, to which we are indebted for additional details. Captain Spratt confirms Dr. Clarke's description in several particulars. "The modern name of Fido-nisi, or "Serpent Island," he says, "has no doubt arisen from the abundance of these reptiles upon the island; and they are still very numerous, being veritable sea-serpents, or water-snakes, living upon the fish in the sea, and inhabiting the cliffs on the coast. More than twenty of them were seen coiled together under a shelving rock that received the rays of a warm October sun; and many having fallen into the wells and cisterns died there: the water in them is not now drinkable, so that water for the Turkish troops is obliged to be brought from the Danube. The serpents are jet black, except along the belly. They have a small head, and are from four to five feet long, and, although said to be harmless, are a very disagreeable-looking species."

It appears that Dr. Clarke's conjecture that remains of antiquity would be found on the island proved to be well founded. Captain Spratt has given an interesting account of the discoveries he made, to which we shall call attention in a subsequent part of the work.*

The mineralogical character of the island is peculiar, since it cannot be said to be a part of

* Sect. XII.

either the Dobrudscha or Bessarabia from any identity with their nearest coasts; neither can the Danube claim it as a creation from its deposits.

The composition or geological character of its rocks, as described by Captain Spratt, show that "it is a fragment of the older group of strata which form the mountains surrounding the south-western division of the Black Sea, Bulgaria, &c.; and it thus appears to be an out-lying peak or fragment of the schistose group of rocks that occur in the north part of the Dobrudscha, near Besh-Tepeh and Tulcha; for it is composed of siliceous strata, containing large crystals of quartz, and passes sometimes into red jasper. The strata are separated by thin bands of friable shale, and show a thickness of nearly 200 feet through their dip; it being from 10 to 20 degrees to the east, although the height of the island is only 130 feet above the sea.

"From this description of the mineralogical character of the island, it is evident that it has no connection with the low flat country of Bessarabia, as it has been often stated, which does not appear to be 10 feet above the sea anywhere, and to be composed of the earthy marle which forms the surface of the level steppe generally. Indeed, the coast of Bessarabia, to the north of Serpent Island, is hardly above the level of the vegetation, reeds and rushes, which grow on the delta of the Danube, and thus appears to be a part of it.

“ The lighthouse now standing upon the
 “ summit of the island was erected by the Rus-
 “ sians, and is built of brick imported for the
 “ purpose. The tower is 50 feet high: a beau-
 “ tiful revolving light of the second order, which
 “ has been recently placed in it by the Turkish
 “ Government, was first exhibited on the 15th
 “ October, 1856.”

Serpent Island was not more celebrated in Recent history.
 ancient times than it has again become of late.
 Twice within the last three years—at the com-
 mencement and the close of the Crimean war—
 this secluded spot in the Black Sea, the ancient
 fame of which was vanished from memory, has had
 the eyes of the world turned towards it, and been
 the pivot on which important events have turned.

The island, once sacred to Achilles, was made The rendezvous of the Crimean Expedition.
 the rendezvous of the allied fleets of England,
 France, and Turkey, on their sailing from Varna
 upon an expedition the object of which was still a
 profound secret to all on board except the com-
 manders-in-chief. The point was well chosen
 either for the feint of an attack on Odessa, or a
 descent on the coast of the Crimea. We happen
 to have preserved a letter addressed to us by an
 officer, part of which was written off the island
 on the 9th September (1854):—

“ We have just passed,” he says, “ in sight of
 “ Serpents’ Island, off the Sulina mouth of the
 “ Danube. Then we altered our course more to
 “ the northward and eastward. The result has

“ been, that we find ourselves all brought up in
“ 22 fathoms of water, out at sea,—I believe as
“ near Odessa as Sevastopol. Which is our
“ destination it is impossible to say ; if it be not
“ the Crimea, I believe there is no one among us
“ who will not be disappointed. It is a glorious
“ thing to be one of such a force. We are now
“ anchored on the skirts of this prodigious fleet
“ of transports and steamers, having on board
“ about 20,000 infantry, a small proportion of
“ cavalry, and eight or nine batteries and troops
“ of horse artillery, waiting for orders. The
“ French and Turkish divisions are not in sight.
“ It has been a magnificent day, and the changing
“ groups of vessels at all distances, till some of
“ them were only just visible on the horizon,
“ formed a most striking scene.”

We will not dwell on details familiar to every reader. Shade of Achilles ! what a spectacle was then presented from the lone, spirit-haunted islet, so long sacred to thy heroic memory !

Re-occu-
pied by the
Turks.

And when the mighty expedition had, after a siege more memorable than that of Troy, done its work and laid Sevastopol in ruins, what do we hear of Serpent Island ? A small detachment of soldiers sent by the Turkish government, with more than their usual promptness, shortly after the Treaty of Paris, land on the rock to take possession, and relight the beacon which had been extinguished during the war. Some Russians immediately follow, professedly with the same

object; but they are too late. Admiral Lord Lyons acts with decision, and prevents the Russians throwing in a reinforcement. Questions are raised by Russian chicanery on the operation of the Treaty with respect to the Isle of Serpents, and, a place almost as obscure, the town of Bolgrad on the new frontier. Insignificant in themselves, they are of paramount importance; the one as almost commanding the principal entrance of the Danube, the other its navigation. Russia persists in her claims. England, nearly deserted by her allies, resolutely demands their cession to Turkey in fulfilment of the Treaty. Her fleet reoccupies the Black Sea; she nails her ensign to the mast, and is prepared, single-handed, to carry her point. It is felt that she has the spirit and strength to do this; she alone has come out of the war with unimpaired resources—rather, she has only just gathered her strength. Russia recoils from a renewal of the contest, and capitulates. Fido-nisi and Bolgrad are the trophies of this bloodless triumph.

Russian
chicanery.

Ceded to
Turkey.

Serpent Island again exhibits its beacon-light, with an European guarantee, to cheer the mariner amidst the gloom of the Black Sea;—perhaps to point his way to a port of refuge under his lee, such as that we propose. Who will say, after all this, that the bright island of Achilles has not a memorable history of its own?—It almost lay in our course, and amay we not be pardoned for making its story an episode to our work?

SECTION IV.

PROJECT OF A CANAL.—*Opinions of Captain Spencer.—The idea long entertained.—Adopted by Mr. Thomas Wilson.—He obtains a concession.—That project abandoned.—The Railway proposed.—A preliminary reconnaissance.*

It has been already observed that Captain Spencer, in his "Travels in European Turkey," recommends the "traveller desirous of making the tour of the Danube from Constantinople, to land at the little port of Kustendjie on the Black Sea, by which he will escape a long and disagreeable voyage round by Sulina, the only navigable channel of all the outlets of the Danube."

Captain
Spencer's
suggestion.

In a subsequent work,* after making the same remark, Captain Spencer adverts to the desirableness of connecting the Danube with the Black Sea, either by a canal or a railroad. "We know," he says, "of no undertaking, no enterprise, either in a commercial or political point of view, comparable to one which would unite two quarters of the globe, nor one that could be completed at so trifling a cost, when we say that it might be done, including cutting, banking, dredging, and piling, for a sum not exceeding 200,000*l*. It is scarcely necessary to observe how great would be the profits to the contractors, or how great, how invaluable, the advantage to the trading interests of every country—except, in-

* *Turkey, Russia, the Black Sea, and Circassia*, p. 240.

“ deed, Russia ; as it would reduce the navigation
 “ of the Danube, in this part of the river, from a
 “ month or more of dangerous windings, through
 “ sandbanks and miasma, to about two days’
 “ voyage. It also happens most fortunately for
 “ the enterprise that at Kustendjie a headland
 “ runs out into the sea, affording the necessary
 “ shelter for ships. Add to which, the holding
 “ is good ; nor is the coast, being here high and
 “ well defined, exposed to the fogs and currents of
 “ the delta of the Danube.”

“ It is said that the Emperor Trajan,” observes ^{Trajan’s}
 Captain Spencer in another chapter, “ entertained ^{design.}
 “ the idea of making a canal from the Danube
 “ to the Black Sea, which, if completed, would
 “ shorten the navigation from this place (Ras-
 “ sova) to Constantinople by nearly one hundred
 “ leagues ; at the same time the length of the
 “ canal would not exceed thirty (? forty) miles,
 “ which might be effected at a trifling expense,
 “ especially when we remember that the ground
 “ is quite level (?), and the Karasu lake, in the
 “ centre, of sufficient depth to assist the under-
 “ taking.

“ The late Sultan Mahmoud, undoubtedly a ^{Sultan}
 “ man of talent and energy, caused the ground to ^{Mah-}
 “ be measured and marked out when we were here ^{moud’s}
 “ in 1835, and would have completed the work, ^{intention.}
 “ had he not been threatened by a war with
 “ Russia.” *

* *Turkey, Russia, &c.*, p. 86.

Mr. Wilson's project of a Canal.

The idea of a canal from Rassoova to an outlet in the Black Sea, with a new town at its mouth near Kustendjie, or a point to the south of it in Touzla Bay, was some years since taken up by Mr. Thomas Wilson, a gentleman well known for his ability and commercial enterprise. He states, in a pamphlet published in 1855, under the title of *The Lowlands of the Danube*, that the project of this canal, which he then put forth, was the result of four or five years' study, founded on all the available information connected with his design.

He obtains a concession.

Impressed with the idea of its feasibility, Mr. Wilson, in conjunction with the Count de Morny and Count Breda, in May, 1856, obtained from the Turkish government a concession, empowering them to construct a canal from the Danube at Tchernavoda to Touzla Bay, and for the establishment of free ports on the Black Sea and the Danube.

A supposed Mouth of the Danube.

Mr. Wilson stated, in a Postscript to his pamphlet, that he had just made an important discovery, which would very considerably reduce the expenses of the undertaking, and be the means of causing a very large saving of time. He refers to a map of the course of the Danube drawn by M. N. de Fer, the Royal Geographer of France, published in 1717, to illustrate the theatre of war between the Austrians and the Turks, which he found attached to the first volume of Count A. F. Marsili's magnificent work on the Pannonico-

Mysian portion of the Danube. "On this map," states Mr. Wilson, "the Danube or Ister is continued parallel to Trajan's Wall up to Kustendjie, where the isle Gratia lies at the mouth. Near the middle of its course it appears to have been crossed by a bridge, which may have been a military construction.

"This then," continues Mr. Wilson, "is one of the four mouths of the Danube which are said to be choked up with sand, very possibly by the same barbarous policy which has led to other obstructions of the navigation. Consequently, instead of having to cut a canal, no more is required than to restore a portion of the original channel, and render it navigable. Four mouths of the Danube were known to exist in 1797. My surveyors, who are now in the Principalities, have by this time received instructions to traverse the course of this ancient mouth of the Danube into the Black Sea." *

* *Lowlands of the Danube*, Preface, pp. xi. xii. It is not to be wondered that Mr. Wilson was led into error on this point, as the belief in an ancient branch of the Danube having its embouchure near Kustendjie, seems to have long prevailed, in quarters, too, where the best information might have been expected. This line was even proposed for the new frontier of the Ottoman empire, when diplomacy was engaged in the question of the cession of territory which it was expedient to make to the demands of Russia.

M. Thiers says of the Emperor Napoleon: "Il n'avait jamais rien fait qui pût détourner la Porte d'abandonner à la Russie les Provinces Danubiennes. Toutefois, par son chargé d'affaires, M. de Latour-Maubourg, il avait fait dire secrètement aux Turcs qu'il ne les croyait pas en état de disputer longtemps la Moldavie

However, it was found that M. de Fer's map was incorrect, it being ascertained by a survey of the ground that Trajan's Wall not only crosses the line of the supposed channel of the Danube, but can be traced over the very ground imagined to have been the bed of the stream.

Mr. Wilson also, perhaps somewhat biassed in

"et la Valachie à la Russie ; qu'il leur conseillait donc de céder ces provinces, mais rien au delà, et que si la Russie poussait ses prétensions plus loin, il était prêt à appuyer leur résistance.

"En effet, lorsqu'il avait été question, à propos des limites de la Bessarabie, et de la Moldavie, de porter la frontière Russe jusqu'au vieux Danube, dont le lit se trouve à Kustendjie, il avait conseillé aux Turcs de refuser cette concession ; et leur avait même offert un traité de garantie, par lequel la frontière du Danube étant une fois stipulée avec les Russes, il s'engageait à défendre l'indépendance et l'intégrité de l'empire Ottoman en deça de cette frontière."—*Histoire du Consulat et de l'Empire*, tom. xii. lib. xl. p. 482.

For ourselves, we freely confess that another circumstance would have tended to confirm the impression thus generally prevailing with respect to this supposed bed of the Danube. On what appears good authority, we are disposed to fix the site of Tomi, the place of Ovid's banishment, in the neighbourhood of Kustendjie, and have already quoted the poet's description in vivid language of what appeared to him the singular effect of the *Ister's* being frozen over. This spectacle he must have witnessed in the neighbourhood of Tomi : for it is hardly probable that he would have made an excursion of fifty miles, in the depth of such a winter, to the nearest branch of the Danube—to say nothing of the poet's wholesome dread of the barbarous and marauding hordes of Scythians who infested the Dobrudscha, as the Cossacks lately did. If our hypothesis respecting the place of Ovid's banishment be well founded, the poet, like the moderns, must have mistaken the chain of lakes in the Karasu valley for a branch of the Danube. They are, indeed, fed by it. But, with all this, there is no resisting the evidence afforded by recent surveys, that it is impossible that such a branch ever followed the supposed channel.

favour of canals by a long residence in Holland, devotes several pages of his pamphlet to the task of showing that they rival, and are, in some respects, preferable to, railways. But few persons, at the present day, will concur in that opinion; and it is needless to pursue the subject further, as it was ascertained, at an early period after the concession was granted, that the idea of a canal, as the best mode of establishing the communication, was founded on want of information and on misrepresentation.

At this juncture, Messrs. Liddell and Gordon, Project of a Canal abandoned C.E., were requested by Mr. Wilson to examine the project; and being already in possession of much information as to the nature of the country through which the canal was proposed, and as to the trade of the Danubian Provinces, were soon able to report generally on the subject. They considered that the canal would be not only a most difficult and expensive work, but that, unless it were made, as projected, on the level of the Danube, it would also be much inferior in usefulness to a railway.

Messrs. Liddell and Gordon were confirmed in their opinions of the practicability of the project by a reconnaissance kindly undertaken, at their request, by Lieut.-Colonel Biddulph, R.A., an Col. Biddulph's reconnaissance. officer whose "Topographical Sketches in the Crimea" are well known, and who had been employed in superintending the laying down of the lines of electric telegraph cable in the Black Sea

and the Bosphorus, with the land lines connected with them. Colonel Biddulph made eye-sketches of the line of country between Tchernavoda and Kustendjie, and views of the town and harbour, one of which is annexed to this Memoir; the sketch conveying a better idea of the nature of the country and of the locality of Kustendjie than can be given by words.

Messrs.
Barkley's
survey.

Before this, Mr. J. T. Barkley, late director of the Heraclea mines, had turned his attention to the construction of a railway between Tchernavoda and Kustendjie, and having carefully examined the proposed line, reported very favourably on its practicability. This gentleman, with his brother, has since made an accurate survey, and completed plans and sections of the line, under Messrs. Liddell and Gordon's directions, on which, and Mr. Gordon's personal examination, the estimates given in a subsequent Section are founded.

Company
formed.

In this state of affairs, a Company was formed, as already mentioned,* for the purpose of constructing a railway across the Isthmus, instead of the canal, provided that, on full investigation, the project should appear to be advantageous. A committee was then appointed to investigate the commercial features of the scheme; and Mr. Lewis, one of its members, went to Constantinople, with the further object of negotiating for an altered concession, accompanied by Mr. Gordon, whose duty it was to examine and survey the line

* Section I. p. 11.

of country for the railway, and the port of Kustendjie, with a view to its improvement.

Details of the results of Mr. Gordon's survey will appear in subsequent Sections. Suffice it, at present, to say, that it was highly satisfactory. In consequence, the application to the Turkish government for permission to make a railway, instead of a canal in virtue of the concession granted to Mr. Wilson, having been vigorously pressed, was at length, after a most strenuous opposition, approved by the Council of Ministers, and while these sheets are passing through the press, it has received the Imperial sanction.

"When it was known," writes the *Times* correspondent at Constantinople, under date of the 18th May, "that the Canal firman would not be
 "acted on, the news was received by feelings of
 "anything but displeasure by a certain section
 "of the politicians of this city; and their feelings of elation were subsequently further stimulated when it became known that the new
 "railway application was promoted by English interests only. On the other hand, the Grand
 "Vizier, and some few others, anxious to develop
 "the prosperity and secure the future defence of
 "the empire, were favourably disposed towards
 "the undertaking. The support of the English
 "Foreign Office was given on the same grounds;
 "and, last but not least, the British Ambassador recognised and appreciated the advantages
 "which the scheme immediately offered to the

Remarks
of *Times*
Correspondent.

“ well-being of the empire, and its probable influence on the future.

“ In order to understand the nature of the opposition offered, and the arguments in favour of the scheme which have finally prevailed, it is necessary to recall the relative position of the proposed Kustendjie harbour in respect to the Danube mouths and Odessa.

“ It should be borne in mind that Kustendjie is 100 miles nearer to the Bosphorus than the Sulina mouth, and 200 miles nearer than Odessa; and that, moreover, this portion of the Black Sea is by far the most dangerous and the most dreaded by shipowners and ship-insurers. Kustendjie, favoured thus by position, cannot fail to become a port of the first class, and a most dangerous rival to Odessa and the Danube ports. Already, as compared with Galatz and Ibraila, the preference given by shippers to Odessa is represented by from 15s. to 20s. per ton. Kustendjie will offer advantages superior to Odessa, both as regards the safety of the harbour, and position and port charges, and will thus establish a competition as fatal to Odessa as the competition of Odessa has hitherto been to Galatz and Ibraila. At the same time the corn-trade of Wallachia and Moldavia, which has hitherto been crippled by the necessity which exists of its being carried on *viâ* the Danube mouths, will be immensely stimulated and augmented, while the now waste

“Dobrukscha will renew its ancient reputation
“for unrivalled fertility.

“Whatever happens,” concludes the *Times* correspondent, “Turkey and the Principalities
“must gain by the intended change. To the
“advantages obtained by Turkey proper there
“is absolutely no set-off, and the increased general prosperity of the Principalities will far
“more than outweigh any injury that may
“accrue to the present emporium of their trade
“on the Danube. Odessa alone will lose her
“present absolute pre-eminency in the Black Sea,
“and be forced to contend henceforth with a
“legitimate and powerful rival.”

The directors of the Company, in whose names the concession runs, are, Messrs. Thomas Wilson, S. Cunard, Price, M.P., Paget, Lewis, and Newall. The capital of the Company is fixed at 300,000*l.* in the first instance, of which 2 per cent. is to be deposited with the Turkish government. The concession is for 99 years, and permits all goods, not the produce of Turkey, being transported free in bond from the Black Sea to the Danube, and *vice versâ*. One-third of the shares has been reserved for Turkish subjects, “and it is understood,” says the *Times* correspondent at Constantinople, “that the whole
“number might be disposed of here, as, since the
“scheme has been publicly discussed before the
“Porte, the revenue it will command, if well
“carried out, has been popularly estimated at a
“rate I am afraid to mention.”

SECTION V.

KUSTENDJIE. — *Ancient remains. — A Greek colony restored by Trajan and refounded by Constantine. — Fortified by Justinian. — Its situation. — Survey of the harbour, and Report on its improvement.*

Ancient
ruins.

KUSTENDJIE occupies the site, and retains, with slight alteration, the name of an ancient town called *Constantina* in the time of the Byzantine emperors. Its former importance is shown by the extensive ruins, blocks of marble, columns, and friezes, which strew the ground for a considerable distance, and the ancient mole and quays of its fine harbour.

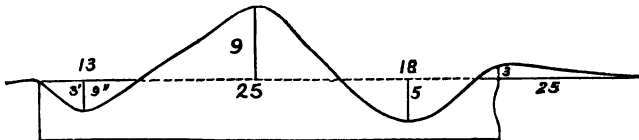
Founda-
tion attri-
buted to
Trajan.

The foundation of this place is attributed to the Emperor Trajan, but, we are disposed to think, without sufficient reason. We find, indeed, that a rampart, traditionally bearing the name of "Trajan's Wall," which extends from Kustendjie to Rassova, the ancient *Axiopolis*, can be traced on the line of the proposed railway. This rampart, it is highly probable, was constructed by Trajan.

As this is a matter of some antiquarian interest, we extract Colonel Biddulph's account of the old fortifications in the neighbourhood of Kustendjie, from his MS. Notes.

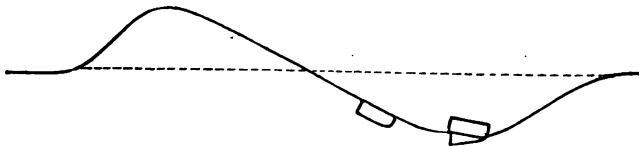
"We soon struck the old line of entrenchment, extending, as marked in Captain Spratt's sketch,

“ from Yeni-Keni to Kustendjie. The profile of ^{Trajan's} Wall.
 “ the work I give in figure.



“ It is from end to end in a good state, and
 “ formed of earth. The slopes are still clear and
 “ defined. At intervals of 400 or 500 yards there
 “ are openings of 15 feet wide, and the line takes
 “ a course of its own across the country, regard-
 “ less of the nature of the ground. . . .

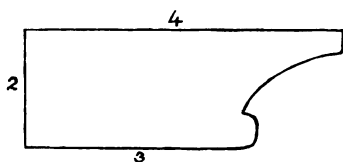
“ At Kustendjie there are Roman ruins, coins,
 “ pavements, and columns of marble in quantity.
 “ The Roman line of fortification appears to be
 “ the second one to the southward. We find at
 “ least three lines, the two first at about three-
 “ quarters to one mile apart, the third at a greater
 “ distance, and not so well defined. I met with
 “ the ‘ Trajan’s Wall ’ on leaving Kustendjie,
 “ where two of the lines of fortifications touch
 “ each other. The difference is striking.



PROFILE OF TRAJAN'S WALL.

“ Not a trace of stonework is to be seen in
 the line I first described, but here there are still

huge chiselled blocks of 4 feet by 3 and 2,



3 by 2, &c.; some cut out for coping-stones. But of course these are but the leavings of what was once

a gigantic piece of building. Every village has carried off a few, and I understand the blocks for the wharves at Galatz were drawn from hence.”—*Colonel Biddulph's MS. Notes.*

Roman
Colonies.

The historian, Dio Cassius, relates that, after the conquest of Dacia,* Trajan established colonies in the conquered country,† but we are unable to discover any record that Kustendjie (*Constantina*) was one of the number; and the name itself seems to point to Cæsars of a later age.

It may easily be conceived that the importance of such a harbour, and of a fortified post on a line of frontier which in all ages has been exposed to the incursions of Scythian hordes, must have attracted the notice of a prince endowed with the talents and penetration for which Trajan was distinguished. Gibbon tells us, that “in the second century of the Christian era, the Euxine was “guarded by sixty ships;”‡ and its best ports must have been the resort, if not the stations, of the imperial navy. We have therefore no hesi-

* A.D. 104.

† Dio. lib. lxxviii. See also Eutrop. viii. 3, 4; and Vict. Cæs. xiii. 4.

‡ *Decline and Fall.*

tation in concluding that Trajan restored, re-fortified, and, perhaps, embellished the ancient town which stood on the site of Kustendjie.

But it was in no proper sense a Roman colony, and could not be one of those his historians relate him to have established in the kingdom of Dacia; for, as we shall be able to show, it did not form part of his conquests, but already belonged to the Roman empire.

We trace its origin to a much earlier period, ^{Greek Colonies.} entertaining no doubt that it was one of the Greek colonies founded by the Milesians and the Heraclians on the south-western coast of the Euxine, between the years 600 and 560 B.C.* Among these were *Istria*, or *Istriopolis*, on one of the mouths of the Danube; *Bizous* and *Zyras* on or near the promontory called *Ictrisia Acra*, now Cape Kaliakri; and *Odyssus*, the modern Varna.†

Two places are named in the lists of these ^{Tomi.} Greek colonies, one or other of which, we have every reason to think, occupied the site of Kustendjie—*Tomos* or *Tomi*, the place of Ovid's banishment, and *Naxos-apud-Tomam*. The phrase applied to Naxos shows its close contiguity to the former place; and Arrowsmith's ^{Kustendjie close to, or identical with, Tomi.} map makes Tomisvar, called by the Turks *Baba*, identical with Kustendjie. D'Anville places Tomi in Touzla Bay, a little, very slightly, south of

* Grote's *History of Greece*, vol. iv. p. 37.

† Cellarius, *Geogr. Antiq.*

Constantina, or Constantiana, as he writes it. The accuracy of these maps in this point is confirmed by careful measurements we have made of the distances stated by Strabo, Arrian, Pliny, and Ptolemy—particularly Arrian, in his unrivalled survey of this coast—between Tomi and various other places the position of which is well ascertained. All concurs to fix Tomi on or near the site of Kustendjie. Our own conjecture is, that Naxos was the port, and Tomi a town closely adjoining.

We may revert to the subject in a future Section, which we propose devoting to a slight sketch of the commerce of the Euxine in early ages;—continuing now our brief notices of the history of Kustendjie.

When the Greek dominions in Europe and Asia were absorbed in the Roman state during the latter days of the Republic, their colonies on this coast shared the same fate. They became the frontier towns on the Euxine of the province of *Mysia Inferior*. That they were dependencies of the empire in the time of Augustus is proved by the selection of Tomi for the place of Ovid's banishment. Then came, in the next century, the conquests of Trajan, which opened the road to them by the valley of the Danube; and then it was that we may imagine Trajan to have availed himself of the important position of Kustendjie by the construction of new works.

In the decline of the Roman empire, when the

Ovid's
banish-
ment.

barbarous tribes pressed on the frontiers, and the Byzantine emperors, too feeble to repel their incursions by taking the field, sought security in the protection of fortified places,—under the shelter of which alone the wretched provincials could find safety for themselves or their property,—the Emperor Justinian lavished his treasures on these and other public buildings, of which Procopius has left us a minute account. From Belgrade to the Euxine, from the conflux of the Save to the mouth of the Danube, a chain of above fourscore fortified places was extended; and *Constantina* is included in the list given by Procopius* of the castles erected or strengthened on points commanding the coast of the Euxine. This is the first notice we are able to discover of the name, from a corruption of which Kustendjie appears to have derived its modern appellation; unless it be the same place as *Constantia*, one of the towns “on the Danube,” mentioned by several Byzantine writers† to have been founded by the Emperor Constantine, between the years 323-331 P.C., after his expedition against the Scythians, when he is said to have erected a stone bridge across the Danube. The name, evidently earlier than the time of Justinian, gives some probability to this conjecture, and the town he is said to have built may only have been restored; flattery

Justinian's
works at
Constantina.

Constantina perhaps
founded by Constantine?

* Procopius, de *Ædific.* lib. iv. c. 10, edit. Paris, 1662.

† See Engel's *Commentatio de Expeditionibus Trajani ad Danubium*, p. 229; edit. Vienna, 1794.

making him the founder, and giving it his name.

Recent
state of
Kus-
tendjie.

Sharing the fate, which, spite of the defensive works of Justinian, the Danubian Provinces suffered from the successive invasions of Bulgarian and Ottoman hordes, it remained for the Russians, scarcely less barbarous, to complete the ruin of Kustendjie. The exposed state of the territory lying between the lower course of the Danube and the sea, with no fortress for its defence of any importance below Silistria, has always subjected it to be overrun by the Russians at their first advance towards Turkey. In one of these invasions the town was demolished, and it now contains a population of only forty inhabitants. The harbour, however, still attracts some share of the commerce of the country. To improve the one and extend the other, and thus raise Kustendjie from its ruins to the importance it merits from its natural advantages, is the great object of the Danube and Black Sea Railway and Free Port of Kustendjie Company.

Its Situation.

And certainly, in whatever point of view it be regarded, there can scarcely be imagined a more favourable site for a commercial city. Kustendjie is backed by a vast extent of country, perfectly open, having a great depth of soil, and producing, whenever cultivated, crops of the finest grain. A bold promontory, running into the sea, forms a natural protection from the north and north-east winds for a large area of water, which, by dredging

and inclosure, may be converted, at a moderate expense, into a safe and commodious harbour, capable of receiving vessels of large tonnage.

In his visit to Kustendjie from Constantinople, Survey in Sept. 1856. Mr. Gordon was accompanied by Lieut.-Colonel Biddulph, R.A., on leave of absence from his duty as Director of Telegraphs in the Black Sea. At Kustendjie they were met by the Messrs. Barkley, then employed in the survey of the intended line, and preparing plans and sections for the works; and also by Captain Spratt, R.N., sent by Admiral Lord Lyons in Her Majesty's ship 'Medina,' to give Mr. Gordon his advice and assistance in the survey of the port. Colonel Biddulph, in the course of his professional duties, had closely observed the line of the Danube, and considerable portions of Bulgaria, Moldavia, and Wallachia. He had also surveyed and roughly sketched, as before stated, the country between Tchernavoda and Kustendjie. Captain Spratt had, since the reconnaissance entrusted to him by the Commanders of the Allied Forces in July, 1854, given much attention to the subject of the port at Kustendjie and communication with the Danube. His great experience in the Black Sea renders his opinion on this subject very valuable.

"Captain Spratt," says Mr. Gordon, in his Report, "remained with us three days, in the course of which the whole project was discussed; different lines of breakwaters and moles were marked out

“ by buoys ; detailed soundings were taken, and
“ those borings of the bottom made, by which the
“ practicability of dredging the bay has been de-
“ termined.

Improve-
ment of
the Port.

“ One of the most essential points to determine
“ was the entrance to the harbour, and after dis-
“ cussion of the question with Captain Spratt, we
“ are of opinion that an entrance from the north-
“ east is of great importance to the convenience
“ of the port. With a north-east entrance the
“ port is accessible as a harbour of refuge in any
“ wind. With it, vessels can leave the port safely
“ in any wind—especially with the prevalent
“ north to east winds—which are fair winds for
“ the Bosphorus. Without a north-east en-
“ trance these advantages cannot be obtained. If
“ there were no entrance from the north-east,
“ vessels might, without the aid of steam-tugs, be
“ detained in the harbour for days, unwilling to
“ quit it by a south entrance ; for they would thus
“ run the risk of being unable to clear the shoal
“ lee-shore intervening between Kustendjie and
“ Cape Touzla.

“ The adoption of this entrance has, however, a
“ very important bearing on the details of con-
“ struction of the harbour. By making a north-
“ east entrance, which we propose to be 150 feet
“ wide, the use of the south-east side of the har-
“ bour for landing-quays is lost. The south-east
“ side of the harbour will be only a breakwater,
“ and the quays must be on the north-west or

“land side, additional space being obtained by
“running out moles or jetties from the land, as
“shown on the plan; and though the objection
“to a more eastern entrance might be in some de-
“gree obviated by the use of steam-tugs, yet,
“after having considered the case in all its bear-
“ings, we deem it most advisable to adopt the
“north-eastern entrance.

“In order to protect the entrance as much as
“possible, we propose a breakwater, jutting out
“in prolongation of Cape Kustendjie, to be carried
“out eventually to the five-fathom line, or about
“400 yards in length. The space between it
“and the prolongation of the ancient mole at the
“entrance of the harbour, may be made available
“for many purposes. It may be easily deepened
“or easily filled up: deepened to form a harbour
“for vessels calling during north winds, or
“filled up to form building ground at this low
“level.

“To take advantage of the whole area protected
“by nature and the works proposed, and to render
“the quay space available to vessels of 14 to 17
“feet draught, the bottom of the harbour, from
“the 1-fathom line to the 3-fathom line, will
“have to be dredged out an average of about 6
“feet. If a greater depth than 17 feet is required,
“the dredging may be carried on as much lower
“as necessary, when the quays are extended. The
“entrance to the harbour, and the area of water
“immediately behind the breakwater, being from

“ 21 to 24 feet deep, the harbour can easily be
“ made available for a larger class of vessels. As
“ the bottom to this depth consists of sand and
“ finely comminuted shells, lying on the clay and
“ soft rock, this dredging will be easy and inex-
“ pensive.

“ If the port be carried out on this plan, it will
“ very soon become available for a large traffic,
“ and will ultimately have about six times the
“ surface accommodation that Odessa has, with a
“ deeper entrance than that port, and a better exit
“ and entrance for the dispatch of business.

“ We here allude to Odessa, because it is the
“ only port in the Black Sea with which we can
“ directly compare the commercial advantages
“ with those of the Danube as it is, and Kustendjie
“ as proposed. Now, the freights to Odessa
“ are generally one-third less than to Galatz.
“ When freights from England are 8s. per quarter
“ from Galatz and Ibraila, they are 5s. 4d. from
“ Odessa. This makes a difference of about 13s.
“ a ton; but freights are usually 8s. from Odessa,
“ and 12s. from Galatz and Ibraila, so that there is
“ a difference of about 20s. a ton in favour of
“ Odessa.

“ But if Kustendjie be made into a port, as ex-
“ hibited on the accompanying plan, the difference
“ of freights between it and Galatz and Ibraila
“ will be even more in its favour than is above in-
“ dicated in favour of Odessa, for the harbour will
“ be better in itself; the position of it, in relation

“ to the countries supplying grain, is much superior to that of Odessa, it will at all times be free from ice, and it is 200 sea miles nearer to the Bosphorus, *and the 200 miles saved are in the most dangerous part of the Black Sea.*

“ Some portion of this enormous difference in freight will of course be available for harbour-dues, some for warehouse charges, some for transport from the Danube—but after taking for all these sufficient to pay the company a large per centage on their capital, there will remain a balance of advantage to traders generally, and for determining the preference for Kustendjie as the grain port on the Black Sea of the Danubian Provinces. Add to this that the position of Kustendjie is admirably situated for the import trade of these countries, a trade hitherto much limited by the impossibility of ships of large draught entering the Danube, and also for a harbour of refuge, and we have abundant motive for the construction of a port, if it can be shown that it can be made at no immoderate cost, and that good communication can be obtained with the interior, not only as regards the existing traffic on the Danube, but also in a manner convenient for connection with a future railway system.

“ As regards a supply of materials for the construction of the moles and breakwaters, abundance of good stone is to be had between Karasu

“and Hassantchair, on the line of railway. There
“is also abundance to be had at Cape Shabla,
“about thirty miles southwards, and where
“arrangements may conveniently be made for
“working and shipping it.”

SECTION VI.

THE PROPOSED RAILWAY.—*Austrian Lloyd's route from Rassova to Kustendjie.*—*French road.*—*Details from the Engineers' report on the Railway.*—*Estimate of cost of Port and Railway.*

“ THE establishment of a safe and commodious
“ port in the Black Sea, at a moderate expense,”
say Messrs. Liddell and Gordon in their Report,
“ can, unquestionably, be easily accomplished at
“ Kustendjie.

“ But the connexion of this port with the ^{Proposed}
“ Danube at Tchernavoda, by a railway, can be ^{Railway.}
“ made under still more favourable relative cir-
“ cumstances.”

Various authorities have been already quoted in this Memoir showing that, both in ancient and modern times, attention has been directed to the great desideratum of effecting this junction, either by a canal or road, the natural facilities for which, as well as its advantages, could not escape observation. We may add to our notices that the route was attempted, twenty years ago, by ^{A route of}
the Austrian Lloyd's for the conveyance of ^{Austrian}
goods by vans; and it was only abandoned for ^{Lloyd's.}
want of a sufficient harbour at Kustendjie, the open roadstead affording no certainty of shipment.

It may also be mentioned that, during the late ^{French}
war, the French traced out a cart-road from ^{Road.}
Rassova to Kustendjie, by means of which they were able to draw, through the channel of the

Danube, considerable supplies of fodder, corn, and cattle from Bulgaria and Wallachia ; making Kustendjie the depôt for shipping them to the army in the Crimea. This road was simply traced, following the easiest line of country, except that, on leaving Rassoza, the road is embanked for a little way along the Danube, and up a branch valley, to defend it from inundations. A cutting was also made in crossing a ridge from this valley to the Yeni-Keni valley, thirty feet deep in a stiff dry clay which cuts easily, without any sign of rock. After about two miles, the road lands on the plateau, and then descends to the Karasu valley, which it follows. Near Kustendjie, gutters are cut on each side, and on approaching the town the road is cut out of the side of the hill, at an easy incline, to the port ; where level places were excavated for the stacks of hay, &c. Two jetties were run out into the water, and some store-houses repaired for stowing the corn.*

The French staff for these operations, stationed at Kustendjie, was not entirely broken up when the English party arrived there ; so that an opportunity was afforded of obtaining useful information from them respecting the earth-work of the railway, the price of labour, and the means of procuring it. Among other things it appeared that, with no advantages for organizing the work, and under the pressure of war prices, the earth-work of the road from Rassoza to Kustendjie

* Colonel Biddulph's Report to Messrs. Liddell and Gordon.

cost the French only 2s. per cubic yard, with an average lead of 500 yards.*

The character of the works required for the proposed railway and a basin at Tchernavoda will appear in the following extract from the Report so often referred to :—

“ The plans and sections of the line, prepared by Messrs. Barkley,” which have been lithographed to accompany Messrs. Liddell and Gordon’s Report, “ render it unnecessary to enter into any minute description of its features.

L. and G.’s
Report
on the
Railway.

“ There are, however, one or two points of much interest, particularly in reference to the site chosen for the line, which require some discussion and explanation.

“ The railway is proposed to be carried along the line of the Karasu lakes, nearly as far as Alikapu.

Karasu
lakes.

“ These lakes depend almost entirely on the Danube for their supply of water ; they are, in fact, backwaters of the Danube. No stream, *not the smallest*, discharges into them ; and it is certain that no springs of any magnitude rise in any of them, save that immediately east of Karasu, and from that there is no discharge

* “ From information given by M. Jarrier, Inspector of the French corps of *Ponts et Chaussées*, as to the facility of getting labour from Wallachia, confirmed by M. Spitz Goldstein, an experienced contractor and merchant of the country, as well as from information gathered indirectly in different ways, wages of 10 to 15 piastres a-day will tempt any number of Wallachians who may be required, provided justice be done to them.”—Note to Messrs. Liddell and Gordon’s Report, p. 23.

Level of
the Da-
nube.

“ in the autumnal months, at which time the
“ supply from the springs is not equal to the
“ evaporation.

“ When the Messrs. Barkleys' survey was made,
“ and at the time Mr. Gordon joined those gentle-
“ men at Tchernavoda, the Danube was at an
“ unusually low level; as it had been throughout
“ the year 1856.

“ It will be observed on the section that the
“ water in the lower lakes was also two feet above
“ the level of the Danube, but it was rapidly
“ falling by evaporation.

“ The channel which communicates between
“ them and the Danube is practically level, and
“ affords alternately ingress to the waters of the
“ Danube and discharge for the waters from the
“ lakes, according to the rise or fall of the
“ Danube.

“ When the Danube is at its lowest level, the
“ lakes are nearly dry, as shown on the plans,
“ excepting that beyond Mejidia or Karasu town,
“ which, as above mentioned, is probably partially
“ supplied by springs.

“ It will be observed that the *unusual floods*,
“ occurring once in three or four years, rise 16·38
“ feet above the lowest level of the Danube. The
“ *mean* level of the river is 10 feet below these
“ unusual floods. This mean level would give
“ above 6 feet more water in the lakes than at
“ extreme low water.

“ The railway will be kept as much as possible

“ along the margin of the lakes--the points of
 “ rising ground being cut through in places as far
 “ as desirable, for the purpose of obtaining earth
 “ and ballast for its construction.

“ The embankment on which the railway will ^{Embank-}
 “ be formed, will vary from 4 feet to 6 feet in ^{ment.}
 “ height, and be constructed chiefly by cutting
 “ from a side ditch, which we propose to serve as
 “ a channel for drainage, and for supplying water
 “ from the Danube when needed.

“ It is to be particularly borne in mind, that
 “ the section of the line is taken, for the most
 “ part, on the lines run for the survey, and
 “ therefore does not show the best line obtain-
 “ able. By slight deviations here and there,
 “ a much more uniform surface may be found,
 “ and from the observations made, and levels
 “ taken, we expect to be able to obtain a line
 “ with as small a quantity of earthwork as is
 “ shown by the section presented to you,
 “ but with gradients rising towards Kustendjie,
 “ nowhere exceeding 1 in 300. Some of the
 “ principal points for deviation are noted on the
 “ section.

“ With regard to the steep gradient, between ^{Gradient.}
 “ the summit and Kustendjie, we propose to adopt
 “ this in the first instance for the sake of econo-
 “ mising the cost to the greatest extent possible,
 “ as well as for shortening the time for construc-
 “ tion—but we also propose to lay out a line, with
 “ cuttings necessary to obtain a gradient of 1 in ^{Cuttings.}

“ 200, to be executed hereafter whenever the trade
“ requires it.

“ The cuttings will stand well at slopes of $\frac{1}{2}$ to
“ 1, and 1 to 1. The embankments, at slopes of
“ $1\frac{1}{2}$ to 1.

Ballast.

“ Ballast can be got in abundance at the Tcher-
“ navoda end of the line. Chalk comes out near
“ Hassantchair; and generally the stone can be
“ easily broken to make ballast. But the rain-fall
“ of the country is so small, that a less supply of
“ ballast than that general in the west of Europe
“ will suffice; and besides, the material of which
“ the embankments themselves must be formed,
“ would not be considered a very bad ballast, for
“ it is neither sandy nor clayey, and becomes
“ sufficiently compact, though easy to cut.

“ This opinion is formed from observation of
“ the remarkably hard surface, which the unmac-
“ adamized French road has assumed, and of the
“ slopes of the cuttings.

Timber.

“ The price of timber, of the kind required for
“ sleepers and jetties, etc., is low, and it can be
“ easily conveyed to the spot. It may be floated
“ to Karasu, and round even to Kustendjie, though
“ perhaps the cheapest way would be to draw it
“ across the land from Karasu. There are like
“ facilities for getting materials of all sorts to the
“ work, for a barge may be taken to the head of
“ the lakes during the mean water level of the
“ Danube, *i. e.* during May, June, July, and
“ August.

“ An embankment of 5 feet high across the
“ valley at Tchernavoda, and a simple sluice will
“ afford the means of regulating the height of
“ water in the lakes, or the channel to be formed
“ for side cutting, and will render the whole of
“ the low land at Tchernavoda available for the
“ uses of the Company.

“ From inquiries made as to the manner in ^{Basin at}
“ which the traffic to the railway will have to be ^{Tcher-}
“ attracted at first and maintained afterwards, we ^{na-}
“ consider that it will be necessary to excavate a ^{voda.}
“ basin on the west side of the entrance of the
“ stream from the lakes into the Danube, for
“ receiving the boats and barges bringing grain
“ for transit to Kustendjie ; to afford shelter in
“ winter for tug-boats and barges, which the Com-
“ pany will, doubtless, ultimately attach to the
“ undertaking ; and also for facilitating the de-
“ spatch of business in discharging vessels. This
“ basin would be quite open to the Danube, but
“ from its position would be well sheltered ; and
“ the construction would be inexpensive, requiring
“ little more than excavation of material easily
“ moved. It would be provided with a number
“ of stages to which the railway waggons could
“ be brought, for being filled direct from the
“ boats and barges.

“ In this manner the country boats and Com-
“ pany's barges, on board of which the grain has
“ been delivered with invoice, come under the
“ protection and surveillance of the Company's

“ officers at Tchernavoda as soon as they arrive,
 “ and the business of transhipment can be most
 “ safely and economically conducted.

“ We have taken every pains to acquire reliable
 “ information as to prices of work, and of mate-
 “ rials delivered at Kustendjie, upon which we
 “ have founded our estimates :—

Quay-
 walls, &c.

“ In reference to the harbour, we have esti-
 “ mated for the quay-walls on a design that
 “ admits of very rapid execution, and at the same
 “ time gives ample guarantee of durability. For
 “ the breakwater we have represented the cost on
 “ two plans of execution, viz., one in which we
 “ suppose that we shall have to make the large
 “ blocks for the outside work, and the crown of the
 “ breakwater, of *Béton*, as was done for the moles,
 “ etc., at Algiers, the interior only being filled
 “ with the stone of the country. The other is on
 “ the plan adopted for the splendid breakwater
 “ recently finished at Fiume, and concerning
 “ which we have had detailed information of the
 “ cost, together with most satisfactory reports of
 “ its stability and efficiency in every way,
 “ although quite as exposed to the action of
 “ violent waves as a breakwater at Kustendjie
 “ can be.

Estimates.

“ The estimate for the Harbour, including
 “ Quay-walls, Breakwater, and Dredging, with
 “ Dredging-machine and Steam-tug, is £64,798.
 “ This calculation is made on the supposition that
 “ the method adopted at Algiers must be adopted

“ at Kustendjie ; but the adoption of the method
 “ found successful at Fiume, will save in the
 “ Breakwater alone £13,468. Or, the above esti-
 “ mate would be reduced to £51,330, including
 “ £9,000 worth of machinery for continuing the
 “ work. On the same basis the estimates for
 “ the successive extensions of the harbour, to its
 “ completion in four or five years, have been
 “ made.”

The estimates for the railway and boat-basin at Tchernavoda, given in detail in Messrs. Liddell and Gordon's Report, require no comment. They comprise Earthwork, Fencing, Permanent Way, Sidings and Rails on Quays, Workmen's Houses, Stations, and Shops, with Rolling Stock. “ The prices allowed are in every
 “ case liberal, with an ample margin for all
 “ contingencies.”

SUMMARY OF ESTIMATES.

	£.
Harbour	64,798
Railway and Plant	180,148
	<hr/>
	£ 244,946
General expenses and con- tingencies, 10 per cent	24,494
	<hr/>
	<u>£ 269,440</u>

SECTION VII.

Resumé and object of the Memoir.—MOLDAVIA AND WALLACHIA.—
Population.—*Physical aspect and produce.*—*Climate.*—*Government.*—*Religion.*—*The Boyards.*—*The peasants.*—*Corn lands.*—
 THE DOBRUDSCHA.—*Physical geography.*—*Productiveness.*—
Climate healthy.—BULGARIA.—*Character of the peasants.*—*The country a vast plateau.*—*Forests.*—*Corn lands.*—*Its resources.*—
A Port wanted.

Resumé. AFTER the details given, in preceding Sections, of the character, the plans, the objects, and the cost of the Danube and Black Sea Railway and Port at Kustendjie, we may confidently ask—what are the projects in the whole compass of commercial and engineering enterprise—speculations afloat, or works fairly launched—which, all things considered, can compete with this? They are few, if any. Simple in design, and easy of execution, it meets a pressing demand, involving interests of the first magnitude, in the readiest way; realizing at once by private enterprise projects which have engaged the councils of Emperors, Sultans, and European Congresses. It proposes to link the East and the West of Europe by the bonds of a commercial intercourse mutually beneficial, providing a new channel for the corn-trade of territories teeming with cereal wealth—a matter of the last importance to the governments and populations of Western Europe—while it opens marts in the corn-producing countries for the

manufactures and colonial luxuries demanded by a growing civilization.

It has further political importance, as directly tending to inspire vigour and contentment in most valuable provinces of an empire which it has long been the great problem of European statesmen to preserve from dismemberment ;—perhaps, we may find, as contributing materially to strengthen the defences on its most exposed frontier. It claims the sympathy of the philanthropist for the moral and social benefits which must naturally follow in its train. It opens to the traveller and the student of history an inexhaustible field of research into the character and antiquities of an old historic race, still preserving many traces of its origin, its Greek and Roman colonization, and its mediæval struggles for independence.

And this field of varied enterprise will be opened out with the smallest possible delay, and at a cost comparatively trivial. The undertaking is not one of those requiring the expenditure of millions, and the cost of which is incapable, perhaps, of exact calculation, while the works are spread over wide spaces and long periods of time. Two years will suffice for the construction of the short line of railway to the Danube, with such essential improvements of the harbour of Kustendjie as will fit it to accommodate the shipping for a large and increasing trade. Two years more will be devoted to further extending the piers and deepening the harbour, which, thus completed on

a magnificent scale, will be incontestably the most valuable in the Black Sea. A quarter of a million of money, or a little more, will cover the cost of the works sufficing to open the trade, and bring the Company's plans into full operation. Another quarter of a million will enlarge and perfect the harbour.

For this outlay the Company, as stated in our preliminary observations, have not stipulated any guarantee of interest from the Turkish Government. After a cautious examination of the resources of the country to which their enterprise is directed, and the statistics of its principal trade, the Directors perfectly rely on the remuneration they offer for the capital subscribed. More than two-thirds of the required capital has been already subscribed by a limited proprietary in England, who have acquired the Concession and lodged the stipulated deposit. The remaining shares are reserved for offer to subjects of Turkey, conformably to arrangements made with the Imperial Government.

Object
of the
Memoir.

If, then, the Company be self-subsisting, and the concern relied on as self-supporting, so that none of the usual appeals to the public are required on its behalf, it may be asked, What is the object of this Memoir?—Its design is simply to furnish information on a subject which is not devoid of general interest. As men of business, the promoters of the undertaking have satisfied themselves of the soundness of the principles on

which they have embarked in it. As men of the world, they may naturally wish to convey to others—circles of numerous friends, and such of the public as take any interest in plans, of which it is not too much to say that they are of national importance—some detailed information of the character of their undertaking; with a compendious account of the localities in which they design to operate, and incidental notices of such objects of curiosity and interest, ancient or modern, as are connected with them. How little is known of the Danubian Principalities, even now that public attention is turned towards them! Who, even in glancing at a map, has marked that bend of the river which facilitates its junction with the Black Sea, saving hundreds of miles of an intricate and perilous navigation, and affording the means of solving at once the problem of freely opening the Danube to foreign commerce? Who ever heard of Kustendjie, though it was a port and station of importance in the time of Trajan and long before? In the popular idea, the Dobrudscha, its surrounding territory, is a pestiferous country, distinguished by the ravages of the cholera on the French columns while making a reconnaissance during the late war. Nothing can be further from the truth than this representation of the sanitary condition of the district.

To remove such false impressions, and, by furnishing reliable information, faithfully depict the

scenes, and open the theatre, of the Company's intended operations, is the object of these pages. It will be our duty, in a subsequent Section, to exhibit the statements and calculations on which the commercial value of the undertaking is founded. But it is in course, first, to take a rapid glance of the countries on the resources and capabilities of which those calculations rest—the Moldo-Wallachian Principalities,—with the much-maligned Dobrudscha and the rest of Bulgaria.

MOLDAVIA AND WALLACHIA.*

Boundaries of Roumania.

The vast region extending from the Dniester on the east to the Theiss on the west, from the Danube on the south to the parallel line of the Carpathian Mountains on the north, with a small sea-coast on the Euxine between the mouths of the Danube and the Dniester,—lies within the proper limits of the ancient Dacia, conquered, as we have already seen, by the Emperor Trajan, reduced by him into the form of a Roman province, and occupied by colonies settled by the Emperor on the conquered territories. From them the whole of this region was in aftertimes named Roumania; and though the blood of the present

* This account of the Principalities is mainly founded on a very comprehensive and accurate work, *Provinces Roumaines et Danubiennes*, by M. Ubicini, lately published at Paris (Didot Frères, 1856). An able review of the work appears in the "North American Review" of January last, of which we have also availed ourselves.

inhabitants may in the course of years have become mixed with that of other races, the proud patronymic is claimed by all. The name "Wallach" is only a translation into the Slavonic dialect of the Greek *ῥωμαῖος*, *strong*, and is the same boastful title.

In all this region of Roumania there is a general identity of language, customs, traditions, and religion; but its political relations are diverse. The western half, included between the Danube, the Carpathians, and the Theiss, is part of the Austrian empire. It includes the provinces now known as Transylvania, the Bukovina, and the Banat of Temesvar, an area of more than 1,100 square miles, with a population of nearly 2,400,000, of different races. In one thing these races are harmonious—hatred of their Austrian masters. The eastern strip of land, some 300 miles long, with an average breadth of 70 miles, between the Dniester and the Pruth, is the Russian province of Bessarabia. Its population, Tartar in the south and Slavonic in the north, is not more than 800,000, very much scattered, with only a single important city—Kischenew. One-third of the inhabitants of this city are Jews, and throughout the province they are numerous.

The remaining region of ancient Dacia, comprising nearly 6,000 square leagues of territory, belongs politically to the Turkish empire. It is this which is now known by the name of the "Danubian Principalities." The whole popula-

Popula-
tion of the
Princi-
palities.

tion is about four millions; 2,500,000 in Wallachia and 1,500,000 in Moldavia. The two provinces, though quite distinct in their government and policy, are usually spoken of together as "Moldo-Wallachia."

Wallachia.

Wallachia, the larger, extends in the form of an irregular parallelogram from east to west, about 300 miles, with an average width of 150 miles. It is separated from Transylvania by the Carpathian range, and from Turkey Proper, Bulgaria and Servia, by the Danube, which forms nearly two-thirds of its frontier. The river Sereth, and a small stream called Milkov, sepa-

Moldavia.

rate it from Moldavia. This latter province stretches from north to south about 200 miles, having an average breadth of about 100 miles. Its eastern boundary is the Pruth, its western the Carpathians, and on the north-west is the small province of Bukovina. It is watered in its whole length by the river Sereth, which flows into the Danube about twelve miles above the mouth of the Pruth.

Physical
aspect.

Few countries in Europe are more favoured by nature than these provinces. In a comparatively narrow space they inclose all varieties of surface and landscape, all varieties of soil except those that are barren. The vast and fertile plains washed by the Danube are succeeded by a middle district of undulating country, partly clothed with woods, and extending in pastures which feed immense herds of horses and cattle. Beyond

these rise the magnificent range of the Carpathians, their slopes affording interminable ranges of pasture, or covered with deep forests of valuable timber, and their bowels abounding in minerals, such as iron, copper, and coal. The snow-clad summits feed numerous streams and rivers which pour fertility on the rich plains, and some of them are said to roll down sands and nodules of gold. The swelling hills are girdled with groves of fruit-trees—the apricot, the pear, the fig, the cherry—all the European fruits, except the olive and the orange, suiting the soil. The vine flourishes, and the wines are said to be of good quality, though capable of great improvement in the process of manufacture.*

Cattle and corn are the staple productions of the country. Of the former the annual export has amounted in value to 600,000*l*. The soil is favourable to the cultivation of all descriptions of cereals, the returns being twenty fold of wheat, thirty fold of rye, and of maize *three hundred* fold. Of the gross produce of wheat, and the quantity exported, we shall speak when we come to examine the statistics of the corn trade of these provinces, in reference to calculations of revenue from the proposed railway and port.

The climate of the provinces is marked by great Climate.

* "The culture of the vine is much neglected; still the wine made in Moldavia has a high character, and finds a ready sale at Odessa and all the Russian ports in the Black Sea."—Spencer's *Turkey, Russia, &c.*, p. 130.

extremes, yet great steadiness. From November to May there are five months during which the atmosphere and landscape are those of a Russian winter. From April to December they have seven months of a genuine Grecian summer—cloudless skies, balmy breezes, and out-of-door life. The local diseases are few, and the chief loss of life is caused by the epidemics which visit the healthiest regions most fatally; not to speak of the ravages of war, to which the provinces have hitherto been perpetually exposed.

Towns.

The people of the Danubian provinces are not dwellers in cities. In the whole of Wallachia there are not more than half-a-dozen towns of more than 10,000 inhabitants; and only one city that would be called large by a western nation. This city, Bucharest, the capital of the province, if we could judge from the number of the churches and convents, might be termed, like Athens in St. Paul's day, "very religious." Its picturesque appearance, as seen from the Dunbovitza, covering an immense plain twelve miles in circuit, the dwellings embowered in trees and gardens, disappears when one walks through the dirty streets. It contains 100,000 inhabitants. The city of Krajowa, the capital of Little Wallachia, has a population of about 15,000 souls. In Moldavia there are only two important cities, Jassy and Galatz. The former, on a hill near the Pruth, has a magnificent site, and is not wholly lacking in objects of interest. Galatz, on the Danube, has

become the centre of a foreign trade of considerable importance, and has resident consuls of the principal European States.

The actual form of government in both the Principalities, under the Constitution of 1831, confirmed by the Convention of Akerman, is that of a semi-republican oligarchy, under a *Hospodar* or Bey, elected for life in a General Assembly, but subject to the suzerainty of the Porte. It would be needless to enter into details of a system of government which at the present moment is likely to undergo important modifications, under the provisions of the late Treaty of Paris, for rendering it conformable to the wants and wishes of the nation.

Nor will our limits allow us to say more of the religion of the Principalities than that nine-tenths of the population belong to the Greek Church; and if excessive devotion to the fasts and feasts, the symbols and ceremonies of their Church, is religion, the Roumanians are a religious people. All other religions are tolerated with the exception of that of Mahomet. There are numbers of Jews and Roman Catholics, but Turks are an abomination. So far from a mosque of Islam being allowed to profane the soil, Turks may not become domiciled in the country. The Moldo-Wallachian Church is richly endowed. Its hierarchy of archbishops and bishops possesses great political influence, and its numerous monasteries absorb revenues which require to be better

employed. One fact connected with the Church established in the Principalities is too important to be omitted. Some have supposed that the claim of protection over them so often put forth by Russia, proves an identity of faith and ritual; but the truth is otherwise. There are minor differences in their liturgy and offices, while the pretensions of the Czar to spiritual lordship is vehemently rejected. In the eyes of the Wallachian the whole realm of Russia is schismatic. His metropolitan is anointed from Constantinople by the successor of St. Chrysostom, and not by the creature of any worldly Cæsar. His spiritual tribute is sent to the Bosphorus, and not to the Baltic.

Leaving these and kindred topics—a tempting field of inquiry—the superstitions, the ceremonies, the social habits, the sports and songs, as well as the military aptitude and organization of the people of the Principalities, we turn to a subject more consistent with the object of these pages—the character and condition of the industrial classes, and especially of the peasantry of the Moldo-Wallachian provinces.

Alien
Races.

The native Roumain race, forming about nine-tenths of the whole population, is intermingled with numerous others of a foreign origin:—Greeks brought in by the chances of commerce—of which they always want the handling—and by the Phanariot dynasty, which gave privileges to their stock; Bulgarians driven by recent persecutions

across the Danube, to exercise their calling as herdsmen and farmers on the neutral ground where, more than ten centuries before, their ancestors found refuge; Armenians, whose numbers, considerable in the eleventh century, when a Persian invasion drove them out of their own country to find a retreat in Europe, have been swelled by repeated immigrations; Jews and Gypsies,*—all make up an alien population whose influence is proportionably far greater than their numbers.

The Organic Law of 1831 divides the population of the Principalities into two great classes, the one exempt from taxation, the other subject to it. The first, or privileged class, includes the *Boyards*, or nobles, all who are employed in the public service, of whatever degree, with priests, monks, soldiers, and domestic servants. The persons thus privileged by exemption from taxation in the two Principalities cannot number less than 680,000.

The class which pays taxes comprehends:

1. Merchants, traders, and artisans, divided into three classes according to the extent of their trade or the nature of their employment. Individuals of this class pay annually a direct

The Tax-payers.

1. Tradesmen, &c.

* The curious race of Gypsies, so puzzling to the ethnologists, can be studied to better advantage in the Principalities than in any other part of Europe. They number 250,000, of whom 15,000 belong to Wallachia; most of them leading a vagabond, or at least a nomade, life, the rest being settled on the lands of the state, the monasteries, and other great proprietors.

tax of from 60 to 240 piastres (20 to 80 francs). They number about 120,000, of which 50,000 are Moldavians.

2. Peasants.

2. The peasant cultivators ; numbering 640,000 families, or 3,200,000 souls in the two Principalities.—Thus more than one-sixth of the population of Moldo-Wallachia is privileged by exemption from contribution to the charges of the government. Nearly the whole falls on the peasants. We must not omit a passing notice of the landed aristocracy, in whose interest, principally, this inequality is maintained.

The Boyards.

The title *Boyard*, in its origin, is rather less dignified than that of *Chevalier*. It means “ox-driver,” referring to the military cars which bore the warriors to battle, drawn by oxen. In the fifteenth century this term became the badge of nobility. It would be tedious to describe the ranks of this nobility, such as it was instituted by Rodolph IV., and such as it now exists in fragments, with the intrusion of an exotic aristocracy which have wrested from it everything but its pride, its privilege, and its boast of ancestry. The genuine Boyards now are mostly poor, and must see with shame and sorrow the lands of their fathers in the hands of Greek adventurers. The great offices of state have passed from their control, and are filled by men to whom the Roumain language is an unknown tongue. But the new nobility have borrowed the ancient titles, and the holders of power claim to be

Boyards as much as the proud paupers who hate them. In Moldavia the oligarchy numbers about 300 in its highest class. In Wallachia it is more concentrated, being confined to 70. This distinction was introduced by the Organic Law before referred to. But the class of Boyards comprehends 3,200 families in Wallachia, and 2,800 in Moldavia, forming a total of 30,000 individuals. Most of the higher class of Boyards being *parvenus*, these are the true nobles of the Principalities, enrolled in the public registers and enjoying hereditary rights, conveyed in musty charters which they are unable to read. The principal of these is exemption from taxation, their only legal distinction from the other cultivators of the soil, in whose labours they share, remarkable still for some remains of native pride while driving the waggon and guiding the plough.

A middle class can scarcely be said to exist in the Principalities. The merchants, traders, and skilled artisans, representing what may be called the Roumanian *bourgeoisie*, in the towns—mostly Jews, Greeks, and Armenians—contribute little to the revenue, and are of small account in the state. We come then to the peasants who cultivate the land.

These are divided into two classes—the *mos-neni*, or small proprietors, to the number of 70,000 in Wallachia, and 50,000 in Moldavia; and the peasants attached to the land, like the *serfs* in Russia, who, in numbers exceeding three

millions, are planted on the domains of the Boyards, the monasteries, and the state. The peasant cannot quit without leave of the proprietor; and, on the other hand, the owner of the soil is bound to allot to each peasant of the better class nine *pogones*, or about eleven acres of land, for the support of himself and his family. In return for this he gives the owner twenty-eight days' labour of various sorts, with the tithe of his harvest, and of the whole produce of his land. Besides this, the owner has a monopoly of all articles of first necessity, such as bread, wine, and brandy, valued at 50 piastres (or 17 francs) per annum, to the cost of the peasant. The peasant may occupy any quantity of land on the same terms in money value.*

These dues, amounting together to about 50s., would appear but a moderate rent for eleven acres of land, a house, and garden. But the difficulty of getting products to market, or finding any market at all, the additional tax for military service, and the *corvée* for roads, with numerous other exactions, swell the annual outgoings of the farming peasant to 20 per cent. of his scanty income.

The
Roumain
Peasant.

The Roumain peasant may well be pardoned for the air of apathy which has been fastened on him by long ages of misfortune, suffering, and useless strife. His memories are all of sorrow.

* Ubicini, *Provinces Roumaines*, pp. 14, 15.

He cannot remember the time when his land was the seat of a nation great and prosperous, or other than the prize and sport of rival nations around him. The vassal of an alien despot, the tool of a rapacious nobility, the prey of armies who have ravaged the land with fire and sword, it is no wonder that his industry has failed and his courage yielded to a fatalist submission. He has had no heart for improvement, since that would make the fruits of his labour more attractive for plunder. His care is only to live from day to day, and to draw enough from the soil to preserve the remnant of his degraded race. His virtues are passive; he is too indolent to be intemperate, and too indifferent to the future to seek for knowledge. His fame is in the past, and his spirit is more in the national proverbs than in the national achievements. A Jew could not boast more of Abraham than the Wallach who proudly repeats, "We have Trajan for our father." The race may suffer, but it cannot die—for says not the proverb, "Rôman no péré,"—"The Roumain never shall perish?" It is better in its shame than others in their glory—for is it not said, "La un Rôman dece Sassi,"—"A Roumain is worth ten Saxons?"

Yet even these traditions of the past form a germ in the character of the Moldo-Wallachian peasant which gives promise for the future. He may be roused from his apathy by better prospects, and stimulated to industry by security for

his gains and the comfort and independence they procure. He comes of a hardy and spirited race. Even now, "he is to be found," says Captain Spencer, "in the forest as a wood-cutter, on the vast prairies as a shepherd, everywhere as a tiller of the soil, and on the mountain top free as the air he breathes. These are the men," he adds, "from whose incessant toil is wrung the wealth that supports the dissipated Boyard and the lazy priest—the provisions which have supported the half-famished armies of their protecting sovereigns, Russia and Turkey, when they selected these plains as the theatre of their interminable wars. However weather-beaten their features may be, however ragged their sheep-skin jackets, however wild and uncouth they may appear with their black hair streaming in the wind, we cannot forbear every now and then admiring the fine manly forms, broad shoulders, and expressive countenances of these peasants, indicating them to be exactly the sort of men to make capital soldiers and support the fatigues of war."* And surely they are as well calculated for hardy husbandmen and labourers! Their willingness to work may be learnt from the information gathered by Mr. Gordon as to the facility of getting labour for the construction of the proposed railway. We have already stated that very moderate wages will tempt any number of Wallachians

* Spencer's *Turkey, Russia, the Black Sea, &c.*, p. 112.

who may be required, *provided justice be dealt to them*.*

The area of land now cultivated in the Principalities is reckoned to extend to between eight and nine millions of acres, but these are mere fragments of the land capable of cultivation. Captain Spencer informs us, that in some districts bordering on the Danube there are tracts of land as large as a German kingdom entirely devoted to grazing, without a single habitation save the hut of the shepherd. Most of these tracts are convertible to tillage; but, according to Ubicini, the whole annual produce is valued at 266,000,000 piastres, or 88,000 francs, which gives an average of only 24 francs per *hectare*, somewhat more than two English acres. "Nothing can exceed," again quoting Captain Spencer's work, "the fertility of the lowlands in Moldavia and Wallachia; and such is their vast extent, that nothing is wanting but a sufficient number of labourers, and a government that will give some security to property, to render these countries what they were in the time of the ancient Romans, one of the principal granaries of Europe. The soil is everywhere of the same dark rich colour that we see in some of the most fertile districts in Hungary, reminding us of the lands of the Mississippi; with this great advantage to the agriculturist, that it requires no manure, and, from its peculiar qualities, scarcely any labour in the cultivation."

* See before, note to p. 71.

BULGARIA, WITH THE DOBRUDSCHA.

Situation. First, of the Dobrudscha, a vast territory, forming the north-eastern angle of the Turkish province of Bulgaria, and extending to Trajan's Wall and the Karasu valley on the south. Its long line of coast eastward is washed by the Black Sea, and at its southern extremity stands Kustendjie, seemingly destined, by its advantageous position, to become the emporium and capital of this fine territory. On the west it is divided by the Danube from Little Wallachia; and the river, making a short turn just below Galatz, forms its boundary northward to the St. George Mouth, where that branch flows into the sea.

Extent. This country contains 5,000 square miles of the richest soil in Europe, having a porous substratum generally of the coral rag and chalk formation. Its general elevation is about 300 feet above the level of the sea. At the northern extremity, however, the old formations appear,* having heaved up the secondary strata, and forming a fine range of mountains towards the extreme north of the Dobrudscha, rising to an elevation of about 2,500 feet, and covered at their base on the northern slopes with fine forests.

**Physical
Geography.**

This vast extent of country is beautifully, but gently, undulating; and is, besides, intersected by numerous small valleys and dales, singularly

* For some details respecting the old formations in the north of Bulgaria, see remarks on the geological characteristics of Serpent Island in the last Section of this Memoir.

tortuous and indeterminate in their direction, but opening ultimately into a few large valleys running to the Danube and to lakes bordering on the Black Sea.

These valleys have no streams to water them. Powerful springs, indeed, rise at the head of some few, but the rivulet thus formed dies almost at its source, is absorbed, forms a bit of green marsh, a mud pool, and is lost. Very rarely are there any signs that *water runs* on the face of the country—no ravines, no rocky or pebbly beds worn by the rush of waters. At most, deep furrows occasionally observed on the steeper parts of the slopes serve to show that water does sometimes fall faster than the soil can absorb it. The porous substratum of coral rag and chalk absorbs the rain not retained by the deep free soil—a soil resembling the finest garden mould—and gives it off in springs which gather their waters in lakes towards the Danube and the sea, little above their level, or are tapped by the wells of the inhabitants.

The soil is of amazing depth, and naturally covered with rich herbage; and, feeding large herds of cattle, sheep, and horses, produces, when tilled, grain crops of the finest quality, without manure, and under the most primitive modes of culture. Such patches are seen scattered throughout the country, and onions, beans, and cabbages seem to grow luxuriantly wherever sown. But nearly the whole territory is in a

The Soil
and Pro-
ductions.

Tartar
Colonies.

state of nature, the moveable wealth of the scanty population spread over it consisting in their flocks and herds. This is principally composed of Bulgarians, a goodly race, cleanly, handsome, friendly, better herdsmen than tillers of the soil. To these are added some colonies of Tartars, one of which, formed of the spoliated inhabitants of the villages round Sevastopol, was, at the close of the war, to the number of 1,800 families, settled in the valley near the Karasu lakes.

Capabili-
ties.

Never was a land more ready to afford a rich harvest; but the labourers are wanting. What might not be done here if this highly-favoured country were occupied by colonies of energetic husbandmen from Western Europe! The sunny slopes would then be laid out in vineyards; groves of fruit trees would embower their neat villages; the valleys would "stand thick with corn;" and herds and flocks would graze on its thousand hills. Nor, though the country is generally open, are there wanting in some situations forests of fine timber trees, though not of great dimensions—the oak, the wild pear, the ash, the plane—to supply materials for building and implements of husbandry. To crown all, there will be an excellent harbour—a free port—within easy distance, with every convenience of warehouses and granaries for storing and shipping the produce of the farms.

Even the lowlands in the northern extremity of the Dobrudscha, which may be drained and

reclaimed from the Danube, as well as the Wal-lachian flats opposite Rassoza, in the immediate neighbourhood of Kustendjie, a tract 50 miles long, by 30 miles wide, may be employed to advantage in the cultivation of a plant but little generally known, but an important article of commerce, madder. It makes a red dye, much Madder. used; particularly for the colouring of soldiers' Its culti- jackets and trousers, as well as in painting. vation. It grows best on alluvial soil, like that formed by the deposits of the Rhine, the Maese, and the Scheldt.

The import of this plant, especially of the root, Import of. into the United Kingdom alone, in the year 1855, is officially valued at more than half a million sterling, the best being worth 2*l.* 12*s.* per cwt. The best and largest samples come from Turkey, the plant being cultivated in great quantities at Kunder, near Smyrna. It is also grown in Boeotia, on the plain of Thebes. The principal other imports were from Holland, France, and the East Indies, where, and in Persia, they have an esteemed species used in dyeing cotton; but it is also exported from Syria, Belgium, Spain, Sicily, Sardinia, &c.

This article was introduced into France by Napoleon I., where, planted in the Delta of the Rhone, below Avignon, it was used to dye the clothing of his troops, when indigo, a production of British India, could not be procured. From

this period the trousers of the French soldier have been dyed with madder.*

The
Climate
healthy.

The observations made by Lieut. Colonel Biddulph, R.A., Captain Spratt, R.N., Mr. Gordon, and the Messrs. Barkley, during repeated visits, and careful and long explorations of the Dobrudscha at various seasons, show how utterly false is the prevailing impression that it is generally, from physical causes, an unhealthy district. We will quote Colonel Biddulph's observations in a communication made to ourselves.

Colonel
Biddulph's
remarks.

Of Kustendjie, he says: "I speak from experience of the healthiness of this spot. It is quite a mistaken notion to suppose that the Dobrudscha is unhealthy. Having travelled over the whole of it, and examined the inhabitants, I find that there is less than the average amount of fever. It is an error to imagine that it is low and marshy. On the contrary, it has a general uniform elevation, being a plateau broken into an undulating surface, occasionally intersected by

* We are indebted to Mr. Thomas Wilson for calling our attention to the cultivation of this valuable plant (*Lowlands of the Danube*, pp. 43 and 75), and this led us to inquire into the trade. Whether madder be now cultivated in England, we are not aware; but we recollect, half a century ago, seeing a field of it on the bank of a rivulet running into the Avon, near Keynsham, in Somersetshire. It is, we believe, an indigenous English plant, though called *Rubia Peregrina*; and we may easily imagine that the soldiers of Caractacus used, as well as woad, in painting their skins for war, a colouring matter which still distinguishes their not degenerate descendants on the field of battle.

valleys, such as the Karasu valley. The soil is dry, and marshes are rare. This character of the healthiness of the climate was corroborated by the testimony of M. Jarrier, an inspector of the French corps of *Ponts et Chaussées*, who constructed the French road to Rassova, and lived at Kustendjie for a year.

“ There is no unfavourable inference to be drawn from the almost total loss of the French Division which marched from Varna to Kustendjie. Cholera came and visited alike the fleet and the army. Ships at sea, with fresh breezes blowing through their ports, and kept constantly ‘on a wind,’ suffered enormous losses. Troops camped on the heights near Varna, where I was myself, —the heights being 800 or 900 feet on the north side, and 700 or 800 on the south—buried hundreds daily, as well as those who were camped by the lake side at Varna, or in the country at Devna and Monasteer. The scourge came, and there was no avoiding it. The French division marched—the cholera was in the air—the season hot; the men, as it were, had the seeds of the disease in their blood,—they were pushed forward by forced marches, heavily laden with rations,—they lay in the long grass, without shelter from the heavy dews,—water was scarce, food hardly cooked, for there was no wood. It is no wonder that young troops fresh come out to the East, and unacclimatized, should perish. And they did perish, leaving a train of dead on the plains; and

French
losses by
Cholera.

when those who survived the march arrived at Kustendjie, the mortality was so great that they were unable to get their dead out of their sight but by shutting them up in a large store, which they blocked up and left full of dead bodies.

“According to my experience, the whole of Bulgaria, and *especially* the Dobrudscha, has a most delightful and healthy climate, taking it as a country in the state of nature, which is always more unhealthy than a country which has enjoyed the blessings of industry, agriculture, draining, &c.”

Bulgaria.

Bulgaria, as before remarked, belongs to Turkey Proper. It is under the government of a Pasha, who resides at Rustchuck on the Danube, a large town of from 40,000 to 50,000 inhabitants, and the capital of the province. Besides the great fortified places, Silistria, Shumla, Varna, &c., there are several provincial trading towns—Plevna, Rasgrad, and others—with populations of 20,000 and upwards.

On crossing the Danube from the Wallachian side we find a great change in the face of the country, as well as in its social and political state. The Wallachian flats on the left bank of the river give way to the long ridge of the Bulgarian heights bounding its southern shore. The Turk, proscribed in the Principalities, rules dominant over the poor Bulgarians of the Greek faith. Whatever this Asiatic race, coming, as the name denotes, from beyond the Volga, may have been

The
Peasants.

when they first overran this part of the Byzantine empire, they are now a most unwarlike, unenergetic race, and submissive to the Turks as sheep to a colley dog. Their habits are pastoral and agricultural, having neither the soldier spirit and gigantic stature of the serf, nor the mercantile enterprise and intelligence of the Greek; for all their trade is a petty local dealing. The Bulgarian is in the country a shepherd or ploughman, in the town a small mechanic or manufacturer, rarely or never a capitalist with wide connections. Rigorously devoted to the mere external observances of the Greek Church, and the literal dicta of the priest, he is wretchedly inferior to the Moslem in the most ordinary conceptions of a vital religion. The Bulgarian has not those salient powers of intelligence and will, which, as years roll over a nation's existence, manifest themselves in a wide political dominion or a high material civilization; but he is not devoid of those unobtrusive household virtues which enrich the state, and keep at a distance the vice and the pauperism which are the cancers of the more crowded communities of Europe. The industry and frugality of the Bulgarian are the chief levers of the fiscal revenues of Turkey in Europe, and great contributors to that superfluity of agricultural production which helps to fill our ships with cargoes, and our granaries with wholesome food for the mechanics of Glasgow and Manchester. His modesty, his

good nature, and the kindness of his disposition, establish a strong claim on the sympathy of the more powerful and the more fortunate Christian nations of Europe.

Such is the character given by an intelligent traveller * of a race of people, with whom the operations of the Railway and Harbour Company will bring their agents into close contact. And it agrees with the reports of their own officials, and others, already referred to.

Bulgaria being a Turkish province, and little known, we are not furnished with any accurate statistics of its produce and commerce, as in the case of the Moldo-Wallachian provinces. But we may be able to convey a general idea of the physical aspect of the country, and its agricultural value, from original sources in our own hands.

Lower
Bulgaria.

A Table
Land.

The whole of what may be called Lower Bulgaria, forming an isosceles triangle, of which a line drawn from Rustchuck to Varna is the base, with Kustendjie, or say a point on the southern branch of the Danube the acute angle, may be considered, generally speaking, as a vast plateau, with an average level of from 400 to 500 feet above the Black Sea, which washes its eastern coast from the Mouths of the Danube to below Varna. The heights are about 900 feet over

* A. A. Paton; *The Bulgarian, the Turk, and the German*. (1855). Mr. Paton adds in a note, "With all this, Bulgaria is miserably under-populated and under-cultivated."

Varna, 450 feet above Silistria, 300 at Rassova, and 160 at Kustendjie ; so that the country is, as it were, tilted up towards Varna and Devna, inclining thence to the N.W. near Silistria, and still more slightly to the N.E. at Kustendjie. While these nearly horizontal lines can be traced throughout the whole country, the elevated plain is intersected by valleys and ravines, with their ramifications spreading out like fingers, and feathering off into the plateau, leaving vast plains of level upland between. These ravines are indicated in the maps by the black lines which generally represent rivers,—but here, for the most part, dry watercourses. The character of the country is precisely the same about Rustchuck. You ascend to the plateau, and the straight horizontal lines stretch before you all around, intersected by ravines which are lost in the general outline.

This description is gathered from the notes of Lieutenant-Colonel Biddulph, who penetrated the country in all directions and on several occasions. Not to swell these pages with details from his journal, a few extracts of incidental notices of its features may sufficiently serve our purpose. Thus, he mentions fine forests of timber at about eight or ten hours' distance from the Danube at Rustchuck ;—" a large corn district having populous villages about Rasgrad and to the westward of Shumla ; and a good valley, leading from Tuturkai towards Rasgrad." On the road from Silistria to

Inter-
sected by
Ravines.

Colonel
Biddulph's
Notes.

Rassova, he describes the long line of heights terminating the Bulgarian plateau as intersected at intervals by deep valleys and lakes, which they call *Gâle*. These lakes are backwaters from the Danube, of which the natives do not know the depth. They are probably shallow. Reeds extend a long way into the water. A stream runs out of each through a deep alluvial soil. On the plateau between the well-known heights of Arab-Tabia and Rustchuck Kainardji, he finds occasional cultivation. He crosses some ridges covered with forest, and descends to a valley with forks both to the right and left, terminating in a lake with a small village. Then he crosses another ridge and descends to an open valley with long slopes to the eastward, well cultivated. A magnificent forest, principally of oak timber, on the plateau, with open glades, is afterwards passed, which occupies four hours. On its skirts is a large village, Bairam Pounari, composed of three hamlets, surrounded by rich corn lands. Again, the traveller rides for three hours through an open country, with easy slopes and fine corn-fields all the way to another village, with an unpronounceable name. On approaching Devna, he passes through a magnificent open corn country, with a fine wide valley to the left. There are many villages with corn all around them.

Forests.

Corn
Lands.

Such is the line of country between Silistria and Varna,—fine uplands, forests, in the clearings

of which is seen the richest soil, and tracts of corn-land round all the villages. The line from Varna to Rassoza is thus shortly described : " After passing through belts of forest on the plateau, open plain is traversed for miles and miles, Basardjik being situated in a vale of the open plateau. Between this place and Rassoza, the edge of the great forest is touched. From its verge to the sea, all is one unbounded open country, a land that ought to be loaded with corn, and to breed and graze endless herds of cattle, sheep, and horses. Though water does not occur in springs, it is always found by sinking wells ; and catches might be made."

Open
Country.

In conclusion : " Volumes have been written," observes Colonel Biddulph, " on the importance of the provinces of Wallachia and Moldavia, while as yet little has been said of the nearer and more beautiful province of Bulgaria. I will only say, that, in my opinion, Bulgaria is capable of being made one of the most productive parts of Europe, and that its produce would be of a most varied character. Its importance, therefore, to the Turkish government is immense. It has only one fortress on its sea-coast—Varna ; but no harbour where merchandize or any heavy material can be shipped or landed at all times of the year. The bay of Varna is an open roadstead, not possessing even the advantages of natural shelter from the most prevailing winds ; during which, when they are of more than ordinary violence, there are

Bulgaria
a fine
Province.

A Port
wanted.

always instances of vessels driving from their anchors and being wrecked on the beach. Nothing has been done to form anything having the slightest pretension to a port. All loading and unloading of vessels has to be done in boats and barges, the difficulties of which, in winds varying from N.E. to S.E., are insurmountable. This was proved when the place was occupied by the allied armies.

“ I am informed that the export of grain from Varna and all this coast, as far as and including Kustendjie, is 400,000 quarters per annum. Varna exports large quantities of tallow, a considerable number of cattle and sheep, with some wine. A good and safe harbour on this coast would be the means of increasing the exports from Bulgaria to an extent of which any one who has examined the country must be led to form sanguine anticipations.”

SECTION VIII.

Fertility of ancient Dacia.—Represented on coins and Trajan's Pillar.—Roman corn-trade.—Food for the people.—The present demand.—The great European corn-fields.—Trade of Odessa.—Exports to the Levant, Mediterranean, Belgium, France, and England.—CORN-TRADE OF MOLDAVIA AND WALLACHIA.—Their exports and imports.—The shipping employed.—Trade of Southern Russia with the United Kingdom.—Of Turkey.—Produce of Bulgaria, in corn, &c.

A GERMAN author, in his Commentary on the expeditions of Trajan to the Danube,* describes an ancient coin of the Roman period, in which Dacia is represented as a female sitting on a rock and holding in her right hand ears of wheat—in her left a military ensign; while two girls, reclining at the foot of the rock, are offering sheaves of corn and bunches of grapes to the genius of their country;—emblems, as the commentator observes, of the fertility of the province. There are also numerous coins of Trajan extant, on the reverse of which Dacia is figured holding a cornucopia.

Fertility
of Dacia.

Figured on
Coins.

Such was the agricultural wealth of this flourishing province in early times, that a well-informed writer, a native of the country, calls it “the storehouse and granary of all Europe;”† and,

* J. C. Engel, *Commentatio de expeditionibus Trajani ad Danubium*. Vienna, 1794.

† “Divitias regionis adeo magnificat Zamosus, indigena scriptor, ut favissimam et promptuarium totius Europæ, hodie et olim, Daciam fuisse testatur.” Fabretti, *de Columna Trajani*.

Trajan's
Column.

on that ancient monument, the stately column in the Forum of Trajan, raised by the spoils of the rich province added by the emperor to the dominions of Rome, as a record of his conquest, and which remains almost unmutilated after the storms and revolutions of seventeen centuries, the traveller traces not only the trophies of a victorious war, but emblems of the primitive wealth of the country.

The wondrous bridge that spanned the Danube—the camp—the battle-field—the Roman cohort—the wild Dacian clans fighting desperately, falling gloriously—ramparts assaulted and towns in flames—the prostrate king and chained captives,—record the triumphs of the Roman arms. Among the spoils we find heaps of the precious metals, collected from rivers which, like the Tagus and Pactolus, are said to have rolled golden sands; while stags and wild boars offer the tribute of the forests, and sheep, cattle, and corn are emblems of pastoral and agricultural wealth. River-boats laden with wheat and casks of wine are borne on the stream of the Danube, nor is a sea-port wanting to show that, even in the times of Trajan, Dacia possessed a commercial importance.* It may represent the port of which the massive moles are still remaining—the *Constantina* of the Byzantine emperors,† our own Kustendjie—the

* Alfonso Ciacono (a Spaniard), *Historia belli Daci, ex simulachris in columna Trajani*, a work printed with Fabretti's at Rome, 1683.

† See Sect. IV.

port now proposed to be renovated and enlarged. At least, we know no other on this coast of the Euxine which has any pretensions to be considered as a Roman work;—and its connexion with the rampart called Trajan's Wall imperishably connects it with the Dacian conqueror's magnificent undertakings.

Again, after the lapse of centuries, victories, followed by commercial enterprise, are opening the broad plains and rich harvests on the banks of the Danube for supplying the wants of the populations in the Mediterranean, as well as of Gaul and Britain,—once, like Dacia, Roman provinces, but now successors to the largest share of the imperial dominion swayed by their former masters. Rome, in the plenitude of her power, drew from all quarters, all the corn-growing countries of the empire, the means of subsistence for the overgrown population of the city and of Italy. From the islands of the Mediterranean, Sicily, Corsica, and Sardinia—from the northern coast of Africa, and the valley of the Nile, with Alexandria for the depôt—from Asia Minor, and the more distant fields of the Danube—the merchant ships of all the maritime provinces were heavily freighted with cargoes of corn to Ostia, the port of Rome, and Brundisium and Puteoli, its outports, one of them the “terminus,” the other a station, of the Appian Way.*

* See Suetonius, *Lives of the Cæsars*; AUGUSTUS, Sect. xcvi. ; CLAUDIUS, xx. xxi. (Bohn's edition, with Forester's notes.)—St. Roman
Corn-
trade.

The people
must be
fed.

A starving population was formidable even to the Cæsars; for no government can neglect with impunity the first necessities of a clamorous people. Well fed, they are easily governed. If the Romans had “*panem et Circenses*”—bread and public sports—they were content to submit to their tyrants. “Cheap bread” has been the cry which has perplexed rulers and stirred the masses in our own times; but with well-filled bellies their ears are little open to political agitation.

These truisms are immediately connected with our subject; for, like Rome and Italy of old, many rich and powerful states are now dependent, more or less, for the subsistence of the people, and consequent tranquillity, on foreign supplies of corn. Whence are they to be obtained, and with what facilities?

A recent writer on the corn-trade observes* that “the most important branch of the Eastern question has yet to be opened. It is no other than England and bread—or food, and the food of Europe.

The great
European
Corn-
fields.

“Very few countries,” he continues, “are adapted for the production of corn for exportation to any large amount; for they require to combine

Paul took passage from the coast of Asia Minor in a corn-ship bound for Rome. Shipwrecked at Malta, he embarked in “a ship of Alexandria,” which landed him at Puteoli, near Naples. Acts xxvii. 2, 38-44; xxviii. 11. 13.

* *Observations on Russia and the United States, considered as Corn-producing Countries*, 1854.

conditions severally rare—of extensive plain lands, moderately fertile, under a genial climate, and not densely populated; with access to the sea, or facilities of transport by means of great rivers. These conditions are realized and combined in Europe only in three states,* Austria, in regard to Hungary,—Turkey, and Russia.

“Up to the period of the French revolution, the western kingdoms of Europe sufficed each for its own consumption; and it is only within sixty years that the grain-trade has become one of importance. The power of steam, and, at a later period, its application to land conveyance, proving available for the increase of every branch of human industry with the exception [hitherto] of agriculture, are silently operating a revolution in the very basis of national existence, as compared with former periods. The nations of the West are daily becoming less capable of supplying themselves with food: thousands of mouths are daily added to the number of those to be fed. Our

The
present
demand.

* Surely Poland and Northern Germany may be added to the list of European corn-exporting countries. The imports of wheat to Great Britain, during the five years 1851-55, from Dantzic and other Prussian ports were about 3½ millions of quarters—the average being 700,000 quarters: 1,144,702 quarters were imported in one year, 1853. The imports of wheat from Mecklenburg-Schwerin ranged, in the five years, from 120,000 to 180,000 quarters, the average being 144,843 quarters; and from Hamburg, Bremen, and the Hanse towns were at the rate of 173,000 quarters yearly. The average of the whole importation from the Baltic and North German ports was therefore about 1,000,000 quarters per annum.—*Annual Statement of Trade and Navigation* (Parliamentary) for 1855.

own condition affords an example of what will soon be general throughout the West, and is for ourselves but one step only in the progress that has been commenced. A few years ago England was able to feed her own population; she now buys grain to the value of 12,000,000*l.* per annum. Supposing peace to remain undisturbed, in about half a generation more, England, France, and Germany may have to import to the amount of between 30,000,000*l.* and 40,000,000*l.* sterling. This prospect is, indeed, an alarming one for us; but it opens the vastest expectations for those countries which possess yet uncultivated regions thinly stocked with people.

Hungary. "The upper basin of the Danube, or Hungary, is the corn-field nearest to us, and the one which may be supposed to enter for the first and largest share in this demand. Except, however, for the adjoining countries, it depends upon a river for the means of selling its produce to Europe. That river is the Danube, so that we may put Hungary aside as excluded from the competition.*

Russia
and
Turkey.

"The matter, then, rests between Russia and Turkey; and, that the latter country is possessed of the requisite resources, was proved in the year 1847, when it supplied, from its European provinces alone, 500,000 tons."—That, taking the bushel of wheat at about 60 lbs. weight, represents two millions of quarters.

* The writer refers, in a note, to the existing obstructions of the navigation of the Danube.

We have no doubt the writer justly estimates the resources of the Turkish empire, including Moldavia and Wallachia. But when he proceeds to state that its exports of grain in 1847, "exceeded those from the whole of Southern Russia, which, including the ports of the Danube, supplied only 430,000 tons," he appears to have fallen into some error. For, however considerable the exports of grain from Turkey were in the year named, those of the southern provinces of Russia, considerably exceeded them. We extract the statement, with other details, from Mr. Jacob's valuable *Memoir on the Trade of the Black Sea*.

"The exports of wheat from Odessa in 1847, ^{Exports from Odessa.} exceeded, we believe, the exports from any other port in any single year either in ancient or modern times. They reached, as shown by a table given, the prodigious amount of 2,016,692 quarters, being 737,190 quarters more than their amount in 1845, the year of the greatest previous exportation. The average price of wheat free on board, in 1847, considerably exceeded 40s. a quarter; but taking it only at that sum, the gross value of the exports of that grain from this single port must have exceeded four millions sterling.*

* Jacob's *Memoir on the Trade of the Black Sea*, in the Appendix to "Tracts on the Corn Trade." Mr. Jacob was employed by Government to prosecute an inquiry into the resources of all the European corn-growing countries, in order to ascertain the supplies which might be calculated on to meet the growing demands of the countries which did not raise corn enough for feeding their populations. The results of Mr. Jacob's inquiry were

This excess may be ascribed, in part, to the extremely abundant harvest of 1846 in Southern Russia and Poland; and, in part, to the high prices and great demand for wheat in this country and in France, which made every corner of the country accessible by the Black Sea to be ransacked for supplies. Of the quantity exported, the largest share went to Marseilles; our imports were, however, heavy, having amounted to 462,000 quarters, including those from Taganrog."

This vast increase in the corn-trade of the ports of the Black Sea was, as already intimated, considered exceptional; but it shows the expansion of which it is capable under favourable circumstances; and it will be found, when we come to examine recent returns, that the trade of the Danubian provinces of Turkey, before the war, closely approximated the scale of this exceptional year, notwithstanding increasing obstacles to the navigation of the Danube from the closing of its Mouths. We now proceed with our extracts from Mr. Jacob's Memoir.

Trade of
Odessa.

Speaking of Odessa, he says: "The principal trade of this comparatively new city is with Constantinople, Smyrna, and other towns in the Levant, Naples, Leghorn, Genoa, Marseilles, &c. It is generally stated that the supply of Constan-

Exports to
the Levant.

very valuable, and awakened attention to the importance of the subject; but we believe that experience has shown his estimates, both of the deficit and the means of supply, to have been considerably under the mark.

tinople requires annually 100,000 quarters of Black-Sea wheat. The Greek islands scarcely, on the average of years, produce sufficient wheat for their own consumption; and, in some years, require a large supply, which is furnished partly from the neighbouring continent and partly from the Black Sea.

“ The Asiatic coasts of the Turkish empire, The Medi-
terranean. especially in Anatolia, are nearly in the same predicament. At times, the market of Smyrna is very favourable for the sale of the corn of Southern Russia. The islands of Malta and Gozo produce only about half as much corn as the 120,000 inhabitants require.”

But the state of population in which its wants Belgium. outgrow the production of wheat exists, to the greatest extent, in Belgium, where the land is the best cultivated in Europe, but does not produce sufficient for the people. In 1854, Belgium imported 25,000,000 *hectolitres*, (844,844 quarters) for four-and-a-half millions of people. Norway, also, and the other Scandinavian States, are constant importers of corn.

The increasing demands of France on the corn- France. markets of the world are clearly stated in the following computation of M. Lefevre Duruflé, appointed French Minister of Commerce in 1852 :—

“ The mean consumption of each inhabitant of France is 3 *hectolitres*, 20 *litres* of wheat a year, or 115,000,000 *hectolitres* (38,300,000 quarters) for

36 millions of inhabitants. Now it is established by the statistics of the last twenty-four years that the importation of corn has been raised by 21,000,000 *hectolitres* (7,000,000 quarters); and, on the other hand, that France has paid in the last fourteen years for cattle 114,000,000 fr. (4,560,000*l.*) It is, therefore, evident that France, in her present state, barely furnishes the nourishment necessary to her 36,000,000 inhabitants." The writer then proceeds to calculations on the growing deficit of food in France from the increase of population, and inquires from what quarter she will obtain the further supply of corn she will require? His calculations of the increase of the French population do not appear to be borne out by the recent census; but taking things as they are at present, and may probably be, we may join with him in his concluding observation: "The question is clearly and plainly stated; it emanates from a prudent foresight; it is worthy of the philosopher's consideration, and the providence of the statesman."*

English
imports of
corn.

To show the extent to which England is dependent on foreign supplies of corn, without encumbering our pages with tables of figures, it needs only to give a few extracts from the official returns.†

* *Le Colon de Van Diemen*, tome 1. *Avant-propos*, p. v., Paris, 1847.

† *The Annual Statements of the Trade and Navigation of the United Kingdom*, presented to Parliament.

In 1852, the import of wheat to the United Kingdom from all countries was 3,060,268 quarters, of which 706,622 came from Russian ports in the Black Sea.

In 1854, the wheat imported from all countries was 3,431,227 quarters, of the "computed real value" of 11,693,737*l*.

In 1855, the import of wheat was somewhat reduced, being 2,686,189 quarters, of the value of 9,679,578*l*.

Flour and wheat-meal were imported in 1854 of the value of 3,970,549*l*., and, in 1855, of 2,304,106*l*.

We confine our notices to wheat, as the staple of food in the British islands, and because very nearly the whole quantity of wheat and flour imported was entered for home consumption. Other kinds of grain, Indian corn, &c., were imported, in 1855, to the value of about five millions sterling, at least one-half of which was re-exported.

It may be remarked that, of the imports of wheat to the United Kingdom in 1855, about ^{Imports of 1855.} 950,000 quarters were received from ports of Prussia, Mecklenburgh-Schwerin, and the Hanse Towns, representing Poland and Northern Germany, 313,000 from Denmark, 201,000 from Spain, 439,000 from Egypt, 248,000 from the United States, and only 80,688 from Turkey Proper. There were, of course, no arrivals from the Russian ports in the Black Sea. The returns

from Wallachia and Moldavia, as connected with the immediate object of these pages, require more detail.

The following Table shows the principal articles imported into the United Kingdom from Wallachia and Moldavia in each of five years from 1851 to 1855.

Principal and other Articles.	Quantities.	1851.	1852.	1853.	1854.	1855.
Beef, fresh or slightly salted	Cwts.	4,961	..	100	..	..
Corn—Wheat.	Qrs.	164,374	86,139	227,143	119,504	9,830
Maize or Indian Corn . . . . .	..	454,592	626,714	373,790	27,586	13,368
Other kinds . . . . .	..	5,276	1,022	64,173	..	..
Seed—Linseed and Flax . . . . .	..	..	611	1,885	1,109	..
Millet . . . . .	..	..	8,143	5,109	..	..
Tallow	Cwts.	2,847	..	687	258	..
Wool—Sheep and Lambs'	lbs.	..	182,778	175,870	..	..

The “computed real value” of the imports in this Table for 1854, just before the late war—with the addition of articles, not enumerated, of the value of 11,093*l.*—is 446,913*l.* The Table, however, only shows the exports of the Principalities to the United Kingdom, little more than one-fifth of their whole exports. Ubicini, who appears to be accurate in his statistics, and whose statements tally in important points with official accounts of which we are in possession, estimates the total exports of the two provinces at 58,000,000 fr. (2,320,000*l.*) He classes them as follows :—

EXPORTS FROM THE PRINCIPALITIES.

Cereals, 4,000,000 <i>hectolitres</i> (say 1,300,000 quarters), of the com- puted value of .	30,000,000 fr.	£.	1,200,000	Total Ex- ports of Moldo- Wallachia.
Cattle and horses .	15,000,000 „		60,000	
Salt	2,800,000 „		112,000	
Timber, wool, hides, tallow, wax, wine, &c. &c.	11,000,000* „		440,000	
			<hr/> £2,352,000 <hr/>	

M. Ubicini states that his figures represent the average of the ten years, 1837—1847, according to official documents. It so happens that we are furnished with a reliable statement of the export of grain, of all descriptions, from the Principalities in 1852, just before the late war, when the quantity was precisely the same as that computed in Ubicini's average of the decennial period—1,300,000 quarters. But we do not thence infer that the trade was stationary. The previous average may have been swelled by the extraordinary export in 1847; and, with respect to wheat, the most important article, which only figures in the Table of British imports for 86,000 quarters in 1852, it shows upwards of 165,000 quarters exported to the United Kingdom the year before, and 227,000 quarters in 1853. It

* *Provinces Danubiennes et Roumaines*, p. 7.

then declined in consequence of the war; but the average export of grain of all kinds to British ports from Moldavia and Wallachia, in the years 1851—1853, was 667,739 quarters.*

England, however, has hitherto taken, on an

* We quote some further details given in M. Ubicini's work of the commerce of the Principalities, and especially of Ibraila and Galatz, the principal ports, partly as affording additional information, and partly as showing how the attention of foreigners is directed to the increase of the trade of Great Britain with those countries.

"Depuis une période de quinze années, le chiffre du commerce de ces deux villes a *plus que décuplé*, et cela malgré les entraves que la Russie ne cesse d'apporter à la navigation des bouches du Danube.

"En 1837 il était entré dans le port d'Ibraila, suivant Colson, 449 navires; les importations s'étaient élevées, la même année, à 280,747 fr., et les exportations à 2,782,501 fr. En 1852, le mouvement de la navigation a été, d'après les tables Anglaises, de 1,049 navires; les importations se sont élevés à 9,902,300 fr.; les exportations à 19,453,925 fr.

"Galatz avait été fréquenté en 1837, par 528 batiments; l'importation et l'exportation réunies ne dépassaient pas 6,500,000 fr. En 1852, il a reçu 619 batiments, et le chiffre réuni de ses exportations et importations s'est élevé à 24,929,275 fr.

"C'est surtout dans le commerce avec l'Angleterre que l'augmentation se fait sentir.

"De 1846, époque à laquelle les tables officielles Anglaises donnent pour la première fois le détail du mouvement commercial de la Grand-Bretagne avec les Principautés—à 1851, cette augmentation atteint presque le double.

"Ainsi en 1846, l'Angleterre avait expédié dans les Principautés des marchandises pour un valeur de 4,879,000 fr.; en 1851 ses envois se sont élevés à 7,365,000 fr.

"Du 1^{er} Janvier au 31 Décembre, 1853, Galatz a expédié 859 navires, qui ont chargé 455,000 kilos. (1,733,550 hectolitres) de blé, mais, et seigle. La moitié de ce total appartient aux ports d'Angleterre; le reste se partage entre Trieste et Venise (362,000 hectolitres); Marseille, Gênes, et Livourne (289,000); Constantinople (164,000); Grèce et les îles Ioniennes (67,000)."

—*Provinces Roumaines*, p. 19.

average of years, probably less than one-half of the grain of all kinds exported from the Principalities. We have before us a "Note of exports from Galatz," dated January 1856, furnished by Mr. Charles Cunningham, H.B.M.'s Vice-Consul there, from which it appears that in the preceding year 890,730 quarters of grain were exported from this port alone, of which upwards of 351,000 were wheat; besides 319,030 okes of flour and 427,745 okes of lentiles (kidney beans). But Galatz is only one of the many ports on the Danube at which grain is shipped, such as Ibraila and Matschin; and it appears from another authentic minute we have in our possession, and to which we shall have occasion to refer again, that, while the total number of vessels entering the Danube in 1851 was 2937, only 619 sailed from Galatz.

Trade of
Galatz.

In 1852, upwards of 200,000 tons of grain were exported from Ibraila, and 120,000 tons from Galatz. Mr. Cunningham is of opinion that, if proper facilities for exports were afforded, these quantities would be doubled in the course of ten years of peace. Even as things are, there has been an extraordinary increase in the exports from Galatz.

The reports of gentlemen from Bucharest and Crajova, whom Mr. Gordon met in the country, as to the comparatively small breadth of land under cultivation, and of the miserable system of culture pursued, quite corroborate Mr. Cun-

ningham's estimate. For these gentlemen were of opinion that, of the actual produce, not much more than half of what is grown can be sent to market, for want of proper means of preparing it—thrashing machinery, &c.; and of convenience for getting it to the Danube.*

Number of
ships in
1855.

Returning to Mr. Cunningham's Note, we find it stated, that the number of vessels departing from the port of Galatz in 1855 was 849, under the flags of twenty-one different nations, enumerated in the Memorandum. Of these, 528 were Greek, 123 Austrian, and 24 under the flags of States in the Mediterranean—Tuscan, Neapolitan, or Roman: the rest principally belonged to ports in the North Sea and the Baltic, from Holland to Norway and Sweden. In consequence of the war, no British vessels entered the port of Galatz in 1855, or indeed, as appears by our Custom-house returns, were loaded with grain in any of the Danubian ports. In 1854, nearly one-half of the grain imported from Wallachia (only 9000 quarters of wheat and 13,000 quarters of Indian corn) was in British bottoms, the rest being the freight of foreign vessels; eleven of which were entered in the ports of the United Kingdom, two Moldavian or Greek, and the rest of other countries, with a total burthen of 2,683 tons.

British
ships.

Comparatively few British ships are employed

* *Liddell and Gordon's Report*, p. 33.

in the Danubian trade, which is principally carried on, as may be inferred from Mr. Cunningham's Note, by an inferior class of vessels from the Levant and the Mediterranean, better suited to pass the bars and encounter the other difficulties of the river navigation. It was, we believe, an unusual occurrence, that 326 British vessels, with the aggregate burthen of 60,000 tons, were entered inwards with cargoes from Moldavia and Wallachia in 1852, as against 239 ships of foreign countries of the joint tonnage of nearly 46,000 tons; the average tonnage of the British ships being only 185, and of the foreigners 138 tons.* There can be no doubt that, with a good harbour, such as Kustendjie, and facilities for the dispatch of trade, a much greater number of British ships, and of a larger class, would be employed in the commerce of the Principalities, and the trade would much increase.

The following table gives the official and real value of the TOTAL IMPORTS from Moldavia and Wallachia to the United Kingdom during the quinquennial period, 1851-1855:—

Total
imports
from
Moldavia
and Walla-
chia.

* *Annual Statement of Trade and Navigation for 1855*, p. 7. The *computed real* value of the imports and exports of the United Kingdom was first given in 1854. It must be noted that for former years the returns are from 22 to 26 per cent. in excess of the value, according to Mr. Fonblanque's computation.

IMPORTS FROM MOLDAVIA AND WALLACHIA.

	1851	1852	1853
	£1,232,391	£1,412,374	£1,194,175
	1854		1855
	£276,284		£42,157
Computed Real Value. }	£446,913		£64,080

The "Principal Articles" are enumerated in a table already given.

English
Exports to
Moldavia
and Walla-
chia.

Turning to the exports to Moldavia and Wallachia, and omitting the returns of the last two years of the period (1851-55), when they were quite insignificant, we take those of the three former.

"Declared value" of the produce and manufactures of the United Kingdom, exported to Wallachia and Moldavia:—

1851	1852.	1853
£284,348	£269,533	£179,510

Colonial produce was also exported to the same countries in those years, the official and real value of which was, in—

1851	1852	1853
£67,749	£45,920	£39,592

Articles
enum-
erated.

Without entering into minute details on this part of the subject, it may be observed that Cottons form by far the largest item in the enume-

rated Table of Exports:—nearly 12,000,000 yards, and 3,000,000 lbs. of yarn, of the joint value of 204,385*l.*, having been exported to the Principalities in 1851. In the same year woollens figure at 7,166*l.*; iron and cutlery, 29,620*l.*; tin and tin-plates, 9,100*l.*; coal, 6,035*l.* Altogether the statement is not very flattering, and the balance of trade much against England.

Not so with the general trade of the Moldo-Wallachian Provinces. We have already quoted M. Ubcini's estimate of the exports at 58,000,000 of francs, (2,352,000*l.*) He reckons the imports at 50,000,000 of francs, so that they balance themselves within little more than a quarter of a million.

M. Ubcini supplies some particulars of the import trade, stating that one-third is Moldavian and two-thirds Wallachian.

He says: "The principal articles imported are manufactured productions from Leipsic, which reach the Principalities by the Bukovine, Transylvania, and the Danube. The merchandize of Vienna consists of cloths, gloves, shoes, carriages, musical instruments, Bohemian glass, looking-glasses, plated goods, earthenware, &c. Cronstadt (Transylvania) furnishes articles required for common use, such as coarse linens, blankets, tanned hides, paper, hardware, kitchen utensils, with powder and lead. The imports from the Levant consist of colonial produce and spices, oil, olives, caviare, salt provisions, tobacco, cotton

Foreign
exports to
Moldavia
and Walla-
chia.

yarn, English and French manufactures, the iron of England, foreign wines, &c. Russia sends meal and flour, salt fish, utensils of brass, furs, &c. The principal imports from France are silks, fine cloths, perfumery, gloves, books, and fashionable articles."

Of these imports, valued at two millions sterling, it will have appeared how small a proportion falls to the share of the British manufacturer, merchant, and shipowner; and it may be worthy consideration whether, under opening prospects, the trade be not capable of great extension—whether a country containing prodigious tracts of fertile soil, the basis of national wealth, be not a field worth cultivating.

Trade with
Southern
Russia.

With the official Tables before us, it may be useful to glance at the statistics of British trade both with Russia, in her southern provinces, and with Turkey; the former as contrasted with our commerce with Moldo-Wallachia, the latter as including Bulgaria, the resources of which form part of our subject.

Russian
exports.

As to Russia, taking the returns for 1854, before the war had disorganized the trade, we find the total imports to the United Kingdom from Russian ports in the Black Sea to have been only of the computed real value of 2,952,741*l*. It stood at nearly the same figure in 1850 and 1851, but had advanced about a million in 1852 and 1853. Of these imports, linseed and flaxseed form the principal item, of the computed real value

of nearly a million sterling. The tallow imported was valued at 101,454*l.*; the wool at 130,513*l.*; and these were the only imports, except corn. There was a very moderate importation of wheat and other grain from the Russian ports in the Black Sea, including the Danube, in 1854, and the import from the Principalities was rather considerable. We therefore, for the sake of a fair comparison, take the year 1852, when the Russian exports of grain were at the highest figure of the quinquennial series, namely, 957,877 quarters. The exports of grain from Moldavia and Wallachia in the same year were 713,875 quarters,—a contrast very favourable to the resources of the Principalities, when the difficulties of the navigation of the Danube are taken into consideration, and it is recollected that, as yet, they have no port like Odessa to concentrate and facilitate the trade. There is no unfairness in selecting this particular year for the comparison; any other in the series would have furnished results equally, some still more, favourable to the case of the Principalities.

No one who has heard of the restrictive tariff of Russia will be surprised to learn that against her exports, to the amount of nearly three millions in 1854, we have only a set-off of not half a million (49,503*l.*) for the produce and manufactures of the United Kingdom shipped to her ports in the Black Sea. In the three years before the war, when our imports were still greater, the exports to Russia only ranged from, say, 105,000*l.*

to 130,000*l*. Disproportionate as our commerce, outwards, is to that of the Principalities with other countries, our exports to them in those three years more than doubled those made to the Russian ports in the Black Sea, and are evidently capable of a much greater expansion.

Trade of
Turkey
Proper.

The commerce of Turkey Proper with the United Kingdom has rapidly increased during the quinquennial period before named, and especially in the last two years of the series. The exports of British produce and manufactures, which amounted to less than two millions in value (1,937,011*l*.) in 1851, were raised to upwards of five millions and a half (5,639,898*l*.) in 1855; besides foreign and colonial produce to the amount of 400,000*l*. Nor, on examining the list of enumerated articles, do we find any item connected

Imports of
Turkey.

with the recent state of war. Cottons, in piece, are the principal articles, the yarn being comparatively inconsiderable. Their value exported, in 1851, was 1,528,855*l*.—in 1855, 3,722,983*l*. Linens, woollens, and iron—unwrought and manufactured—are large, and much increased, items in the returns. Tin figures largely, so does copper. In short, the table exhibits almost every description of manufactured articles, from haberdashery to jewellery, and from glass and china to silks, soap, and stationery.

Whether any, or what, part of this large quantity and variety of manufactured articles finds its way to Bulgaria, we are without information. The Bulgarian peasant has few wants; but

there are populous and thriving towns in the province which, we may hope, absorb some share of our products. They will doubtless penetrate into the country in the way of a direct trade when Bulgaria has a good port. At present she has none worthy of the name; and we imagine that she derives most of her supplies of manufactured goods and luxuries from Austria and Germany, by the channel of the Danube.

With respect to the exports of Turkey Proper, ^{Turkish exports.} the case is somewhat different. Considerable portions of these consisting of agricultural produce, Bulgaria contributes her full share. The total exports of Turkey to the United Kingdom in 1855 are valued at 2,294,571*l*. The enumerated list embraces a wide range of commodities. Not to dwell on large items, in which Bulgaria can have no share—such as silk, sponge, olive-oil, opium, raisins, and rhubarb—we select a few exhibiting the exports of agricultural produce. The grain of all kinds exported to the United Kingdom in 1855 was 152,000 quarters, of which 80,688 were wheat. This was a low year. In 1851, the first year of the series, Turkey Proper shipped to British ports 420,977 quarters, of which 133,998 were wheat; and in 1853, 617,983 quarters, including upwards of 228,000 quarters of wheat. The value of the grain exported in 1855 is computed at upwards of 434,000*l*. Then, we have flax and linseed, 102,000 quarters, of the value of 321,000*l*. Of sheep and lambs'-wool we have 604,000 lbs., valued at upwards of 22,000*l*. In

1853, upwards of 2,600,000 lbs. were imported. Goats'-hair, of the weight of 2,871,000 lbs., and value of 284,000*l.*, was imported in 1855, a quantity rather exceeded in 1853. Madder, of which we have spoken in a former section, figured at 93,000 cwts., of the great value of 246,000*l.* Tobacco, of which 945,000 lbs. were exported to England in 1852, and 3,387,742 lbs. in 1854, fell, in 1855, to 589,000 lbs.

Bulgarian
produce.

Bulgaria produces, or is capable of producing, most of these articles in the greatest abundance; but we will confine our observations to grain, cattle, and sheep, the staple, at present, of the exports of all the Danubian Provinces. The statistics of a country under Turkish rule are not easily ascertained:* we are, however, in possession of reliable information from which some idea may be formed, at least of the exports of grain, the produce of Bulgaria, in late years. Its capabilities of increased production may be gathered from a former Section, in which its physical character was described.

Bulgarian
exports of
grain.

The export of grain from Varna and other places on the coast, as far as and including Kustendjie, has been estimated, we are given to understand, by H. B. M.'s Vice-Consul at Varna at 400,000 quarters per annum. Of this, the quantity shipped at Kustendjie itself, and Mangalia, a small port a few miles to the south of Kustendjie, is said to exceed 20,000 *tons*. In one

* See Report of Mr. Consul Barker, of Aleppo, in the *Abstract of Reports on Trade* (Parliamentary) for 1855, p. 177.

year, also—1852, we believe—upwards of 40,000 *tons* were exported from Matschin, a Bulgarian port on the Danube, where it washes the Dobrudscha. And, on the whole, seeing that our official returns exhibit exports of 400,000, and even 600,000 quarters of grain in a single year from Turkey Proper to the United Kingdom only; that Constantinople alone consumes yearly 100,000 quarters of Black-Sea wheat; and that Bulgaria is both the most fertile province of the Turkish empire, and the only one which, hitherto, has been able to supply any very considerable export of grain,* there seems no reason to doubt the correctness of the estimate in Messrs. Liddell and Gordon's Report, founded on the best information to be procured, that the export of grain from Bulgaria has been upwards of 600,000 quarters per annum.† We find no returns of tallow Tallow. imported to this country from any part of Turkey Proper, though that is one of the products of so pastoral a country as Bulgaria, and we are informed, on the best authority, that it is shipped

* In regard to Mesopotamia, Syria, and Anatolia, see *Reports of Consuls* (1855), pp. 179, 187. Syria has a small export of grain to the United Kingdom. The valley of the Euphrates is undoubtedly rich, and capable, if proper culture could be introduced, of producing large supplies of grain for exportation. At present, there is neither, to any extent, cultivation nor the means of transport. And even should the contemplated railway be constructed, the cost of transit over 700 miles of rail, from the point where the Euphrates becomes navigable, to the sea-board must, we think, prevent the grain of Babylonia from competing in the market with the produce of Bulgaria and Moldo-Wallachia, collected by the Danube and its tributaries, and conveyed to such a port as Kustendjie will shortly become, by a railway less than 40 miles long.

† *Report*, p. 37.

Sheep's
wool.

extensively from Varna. Flax and linseed figure largely in the Turkish exports to England, more than 320,000*l.* being their computed value in 1855. We are not aware whether any part of the 102,000 quarters imported was grown in Bulgaria; and we observed, with surprise, how small a quantity of this valuable article has been exported from the other Danubian Provinces. Sheep's wool, of which nearly three millions of pounds were shipped to England from Turkish ports in 1852 and 1853, must be largely drawn from Bulgaria.

Cattle
and wine.

We do not know that we can add anything to these notices of the trade of Bulgaria except that we are informed by friends, who became well acquainted with Varna both during and after the close of the war, that very considerable quantities of cattle and sheep, with some wine, are shipped from that place. We believe that the same may be said of Kustendjie and the smaller ports on the Bulgarian coast.*

* Captain Spencer, when travelling in Bulgaria, well appreciated its resources, and became sensible of its wants. "In this province," he says, "the corn of every description cannot be surpassed in weight and nutritious qualities; the wine and fruits are excellent; with tallow, hides, wax, honey, timber, and live stock of every description; all of which might be quadrupled in a few years, if the inhabitants had a market for the sale of the surplus produce of their labour.

"The want of a commercial outlet is severely felt by the industrious population of the rich and fertile Bulgaria. In the absence of roads they are obliged to transport the produce of the country on the backs of mules and horses, across steep mountains and rugged defiles, to seek a market in the large towns of the Danube, and those of Thrace and Macedonia."—*Travels in European Turkey*, vol. ii., p. 399.

We have now seen, in dealing with a most *Resumé*. essential part of our subject, that, in the present day, as in ancient times, the wants of European populations outgrowing the power of production in densely-peopled countries, distant parts of the Continent have been ransacked to supply the deficit in the home growth of corn. After glancing rapidly at the fields which, from the fertility of their soil, the extent of their area, and their facilities for transit, are best adapted to meet this demand on a large scale, we have examined, in detail, the capabilities of the Danubian Provinces, as corn-growing states, and their commercial relations with our own and other countries; contrasting them, as respects ourselves, with those of their neighbouring rivals in the corn-trade, the southern provinces of Russia connected with ports in the Black Sea.

It has appeared that, under all disadvantages, Wallachia, Moldavia, and Bulgaria have exported very considerable quantities of corn; and that this export admits of an almost indefinite extension when a convenient harbour and entrepôt are founded on the coast of the Black Sea, and channels opened for transporting to it the produce of the country cheaply, and without delay. These facts have been established by reference to official documents, and on most reliable information.

It has also been shown, in former Sections, that the port of Kustendjie, with the proposed improvements, and the short line of railway con-

necting it with the Danube, will provide the facilities required for an extended trade, so far as it can be concentrated on these points; and that the works can be quickly, cheaply, and easily executed.

Thus, two main points are solved in the problem, "How the populations of Western Europe are to be fed?"—for it is not too much to infer, from all that has been stated, that, with the demand stimulating production, and sufficient means of transport provided, the Danubian Provinces, alone, are capable of exporting, on the average of years, a very large proportion, perhaps one-half, of the six or seven million quarters of grain required to meet the general deficit of European production. And, of course, there would be no difficulty in procuring the remainder.

The ques-
tion of
profit
remains.

It only remains for us, in carrying out the plan of our Memoir, to inquire what returns may be calculated, in the shape of profit, for the capital proposed to be embarked in the undertaking—in short, to ascertain, as far as possible, its commercial value. For, however specious and even important the project may appear, in various points of view, to this test it must be brought at last.

False
action of
Govern-
ments.

We remarked, in the earlier part of this Section, that Governments have been perplexed, both in ancient and modern times, with the serious question raised by a deficiency of the staple of food in countries where the consumption of corn has been in excess of its production. In the worst

ages of Rome, the provinces were drained for the supply of imperial largesses to feed an overgrown and indolent population. In modern Europe we frequently hear of restrictions on the export of provisions, when a failing harvest threatens scarcity. An imperial decree has lowered the price of bread in favour of the dangerous masses of a great European capital, at the expense of a public indemnity to the bakers. Against the plainest rules of political economy, even so cautious a statesman as Sir Robert Peel went into the corn-markets of the world to alleviate the sufferings of famine-struck Ireland in her deep extremity, at the cost of millions from the imperial treasury. But in this exceptional case, a measure of the sternest necessity was at least disguised by the attempt to apply the labour test; much as, notwithstanding, the public bounty was abused. Such an extreme necessity, and such a remedy, will never, it is to be hoped, recur again.

Upon the sound principles now firmly established in this country, it is no part of the government or the legislature to interfere with the relations of commerce, except in the way of removing its burthens and restrictions and granting facilities for its expansion. All undertakings, whatever claim they may have to a public or national character, are left to individual, or combinations of individual, enterprise. Even the creation and control of our great lines of railway, which many sensible persons have considered proper subjects for the immediate action of government,

The true principle.

Repeal of
the Corn
Laws, &c.

as they are in some foreign countries, have formed no exception to the general rule. Bounties, monopolies, and protective duties, have all vanished from our commercial code ; and it has been found that free trade in corn is the best safeguard against famine and the apprehension of it. To this, indeed, we owe the present project of a corn-conveying railway from the Danube to the Black Sea ; for it is obvious that it could have no basis, would be quite chimerical, while foreign corn was, on the average of years, excluded from our ports by high protecting duties.

Proper
action of
Govern-
ments.

All that Governments can properly do in promotion of undertakings which are of national interest, such as the present, is to lend them their countenance, and to use their influence to remove difficulties when occasion requires. The political and economical importance of the Danube and Black Sea Railway and Harbour, could not escape the penetration of H. B. M.'s ambassador at the Porte ; and the promoters have to tender their thanks to Lord Stratford de Redcliffe for the support given them at Constantinople under rather difficult circumstances. Thus, incidentally, it has been in the power of the British Government to forward—what must be an anxious care of all governments, when the growth of corn becomes inadequate to the wants of the people—its accumulation in the markets of the country. The thanks of the promoters are also due to those members of the Turkish cabinet, who, taking an enlightened view of their national

Lord
Stratford
de Red-
cliffe.

Turkish
Ministers.

interests, opposed a firm resistance to the intrigues by which Foreign Powers, jealous of our ascendancy, or of their own interests, raised difficulties to the grant of the Concession. We trust that this may not be considered an unfitting opportunity for making these public acknowledgments.

To conclude. This, like all other similar undertakings, however grand their design or beneficial their objects, requires, to give it standing in this mercantile country, as just observed, to be brought to the test of its commercial value. It would be absurd to suppose that the proprietary embarking their capital in the construction of the intended works does not look to a good dividend on the outlay, upon grounds cautiously scrutinized, and which it will be our business presently to lay before the reader. But, besides this, men of a generous spirit must naturally feel a just pride in being engaged in an enterprise so important and useful; nor can they be insensible to the credit which will attend its success. We have often read, as well as heard the sentiment propounded, when attending agricultural meetings in our younger days—"that he who makes two blades to grow, where one only grew before, is a benefactor to his country;"—and, with all the love we bear to our native soil, and all our regard for the several classes more especially connected with it, we cannot but apply the same sentiment to those who are the means of bringing two bushels of wheat to its shores, from countries whence only one came before.

Concluding sentiment.

SECTION IX.

TRAFFIC AND REVENUE.—*System of the Corn Trade.—Central position of Tchernavoda.—Competing projects.—Question of a port and town on a Mouth of the Danube.—Proposed railway from Rustchuck to Varna.—Saving in freights.—Expenses of the present trade.—Advantages of the new railway and port.—Estimate of exports and imports.—Estimate of revenue.—The passenger trade.—Traffic between Central Europe and Asia.*

System of
the grain
trade.

To form an estimate of the probable traffic on the Company's railway from Tchernavoda to Kustendjie, with the revenue arising from it and from the harbour dues, it would be necessary to inquire into the system of the trade in corn carried on in the Danubian Provinces, in order to ascertain what part of it may be probably diverted into this new channel.

Much information was collected on this subject during Mr. Gordon's visit to the Provinces in 1856, and the result is embodied in the Report, which, jointly with Mr. Liddell, he addressed to the Directors on his return. The following statements are extracted from the Report:—

“The grain trade on the Danube has increased so rapidly since it became untrammelled, by the treaty of Adrianople in 1830, that the arrangements under which it is conducted are still of a very rude character.

Western
Wallachia

“From the western districts of Wallachia, of which Crajova and Slatina are the foci, it is sent

by land to Kalafat, and down the rivers *Schyl* and *Aluta*, in country boats, as well as largely in carts, to the Danube, where it is transferred to country lighters (kirlaches), or to the barges of the Danube Steam Navigation Company, to be carried to Ibraila for shipment in sea-going vessels. The grain is either warehoused, or shipped direct from the barges and kirlaches into the sea-going vessels.

“ From the middle district, of which Bucharest is the centre, the grain passes down the Argish and the Jalomnitza rivers, and also largely, by carts, to the Danube, at Islas, Giurgevo, Kalarasch, Oltenitza, Jalomnitza, &c. ; a large proportion going westward towards Kalarasch and Jalomnitza, and thence on to Ibraila, where the grain is warehoused, or transhipped directly into sea-going vessels. Middle Wallachia.

“ From Bulgaria the grain is shipped, even at Rustchuck and Silistria, into small coasting vessels, having been brought to the Danube by carts. The bulk of the grain, however, is carried from the interior to the river in bullock-carts, and is there shipped in small Turkish kirlaches, which take it to Matschin for transfer into sea-going vessels. Bulgaria.

“ From Moldavia the grain is brought down the Sereth and its tributaries, but the great bulk is brought by carts to Galatz, where it is warehoused, and then transferred to sea-going vessels. Galatz and Ibraila are called free ports by their Moldavia.

respective governments, but most improperly so; for grain and tallow cannot be imported from Wallachia into Galatz, nor from Moldavia into Ibraila; and the importation of these two articles from any quarter whatever, even for exportation, is prohibited. As grain and tallow form nine-tenths of the export trade of the Danube, it seems somewhat illusory to give the name of free ports to these places.

System of
trade.

“The system of trade seems to be for the corn-merchants to employ agents who buy the grain in the country direct from the growers, and to undertake all the risks and perils of bringing it to market, whether at Ibraila, Galatz, or Matschin, or even where it is ultimately delivered,—at ports in the Levant or Mediterranean, in England, France, or Germany. This system gives rise to innumerable losses, delays, and endless wranglings to check the frauds and waste which take place at each transshipment. As already observed, grain, the produce of one province, cannot be brought to another, even for shipment, but the vessel must go to the port where the grain lies, in order to receive it. The merchant residing in one of the towns, generally Galatz, may be shipping grain from the others at the same time, without being able to ascertain the quality or condition of the grain he is shipping at any port but that at which he resides. This mode of conducting the trade is also inconvenient and expensive to shipmasters, who must first call at Galatz

for orders, and may afterwards be sent to any of the other ports.

“ These few remarks are sufficient to prove the immense advantage that will accrue to trade by the establishment of a well-regulated, commodious free port at Kustendjie, where the grain of all the provinces may be concentrated by easy arrangements, much cheaper in the end than those of the rude system at present in use.

“ The whole grain of Wallachia passes Tcherniavoda, save that going out by the Jalomnitza. But this is only thirty miles lower down the Danube, and there the current of the Danube is not more than three miles per hour, so that a small tug-steamer would suffice to bring the grain from the Jalomnitza to Tchernavoda, at a less expense than if the craft were to go down to Ibraila for transfer of their cargo there, and then had to work up against the stream for nearly sixty miles.

“ A system of steam-tugs, few in number, would, it is certain, soon divert the grain trade from Galatz. Indeed, it has already been strenuously recommended by persons most experienced in the grain trade of that port, that steam tugs should be systematically employed to take barges laden with grain down to Sulina, there to be discharged into sea-going vessels, the barges being towed back again to Galatz. Nothing can illustrate the wretched state of the navigation better than this fact: for it is to be remembered that

Central
position of
Tchernavoda.

Steam-tugs.

there is no town or accommodation except of the scantiest kind at Sulina. Now the distance from Galatz to Tchernavoda is about the same as to Sulina or St. George, and with arrangements which can easily be made, Tchernavoda will become, as it were, an entrance to, or wharf for, a great port at Kustendjie, infinitely surpassing in every advantage for trade anything that the most sanguine have imagined as capable of being formed at Sulina or St. George.”—*Liddell and Gordon's Report*, pp. 7—10.

A Port at
St. George.

Any idea of making a port for the shipment of merchandize, and establishing a commercial town at the entrance of either of the Mouths of the Danube, appears chimerical. To say nothing of the pestilential character of the country,—the expense of building wharves and warehouses for the accommodation of the trade would be enormous; and nothing would be gained to tempt the transfer of the commercial establishments of Galatz and Ibraila to the marshes of the Delta. Captain Spratt considers the St. George branch as the preferable one for the proposed improvements,* and it is not so much the navigation of the river as the bar at its mouth which prevents the access of vessels of large tonnage. If that can be lowered to allow depth of water for passing the bar, the impediments to its navigation can easily be removed, and ships that can pass the bar will be able to load or discharge their cargoes at the wharves of

* See before, Section II.

Galatz and Ibraila—where the great bulk of the trade of the Principalities centres now—instead of its being reshipped at the mouth of the river, as at present, from vessels of small burthen.

Captain Spratt gives the following account of the land lying at the mouth of the St. George, ^{St. George no site for building.} which seems to preclude any idea of its becoming the site of a flourishing commercial town.

“ It has been supposed that the St. George mouth has some high and dry ground, advantageous for building upon ; but it is throughout alluvial, and composed of sand ridges four or five feet above the sea. This strip communicates with an extensive dry part in the centre of the island, formed between Sulina and St. George, where there is a large village called Kara-Uman, and several farms.” Again he says :

“ The river does not appear to be subject to very sudden or frequent floods ; but about every five or seven years the whole Delta becomes overflowed for a foot or more, generally in the month of May or June, by a progressive rising of the waters on the melting of the snow (called by the natives the *Plimera*), which obliges the inhabitants of Yuzlin and the lower hamlets to quit their cottages for the time, and retire to Besh-Tepeh and Tulcha ; but the Russian guard-houses are never deserted, the houses being more substantially built of wood, and raised about two feet above the ground.”

The village of St. George is described as con-

taining about twenty families, but many other houses are being built. The inhabitants are chiefly Russian fishermen—refugees. It is but fair to remark, that Captain Spratt says, “They are a robust and healthy-looking race of men, and seem to suffer little from fever, although indulging in excessive inebriety. It is surprising,” he adds, “to find how lightly the inhabitants speak of the Danubian fever, and the few that are attacked seriously.”*

However this may be with respect to the inhabitants, so far as Captain Spratt’s observation extended, it is notorious that the malaria of the marshes, if not fatal, is extremely deleterious to strangers. The crews of ships navigating the Danube suffer severely from it; and, at certain seasons, the hospitals of Constantinople are crowded with sailors struck down by the fever. On the whole, we venture to predict, that no town and port on a mouth of the Danube will ever rival Kustendjie.

Proposed
Railway to
Varna.

There is another project, imagined at one time to interfere with the prospects of the Company’s proposed railway and port—a line of railway from Rustchuck having its terminus at Varna—which it may be as well to notice here.

On more than one occasion, at Messrs. Lewis’ and Gordon’s first interview with Fuad Pasha, in conversation with Rustem Beg, and in discussion

* *Report on the St. George and Sulina Mouths of the Danube*, by Captain Spratt, R.N., O.B.

with Mr. Jarrier * and others, it was made an objection to the concession of the Kustendjie line that it would cause the line from Rustchuck to Varna to be deferred. The objection was, however, overruled, and the Concession granted; it being felt that if capitalists are prepared for the execution of a general system of railways in Turkey, the existence of the Kustendjie line would not deter them from making a line from Rustchuck to Schumla and Varna. But the objects of the two lines are essentially different. ^{The projects compared.} The construction of the Varna line will not divert from the other any portion of the traffic on which it depends, such as the export corn-trade of the Danube. It would do no more than compete on tolerably even terms for passenger traffic to Constantinople, &c.; and even for the heavy traffic of that kind, Kustendjie would be the cheapest, and not a longer route. Still, the Varna line is in itself a good line for the internal communications of Bulgaria, passing through a fine agricultural district, touching on towns of large population, and strategically important as connecting the fortresses of Varna and Schumla with the line of the Danube.

In the Report of Messrs. Liddell and Gordon, the commercial view of the two projects is thus treated:—

* Mr. Jarrier was employed by the French Minister of Public Works, through the late M. Baumgarten, to make a preliminary instrumental examination of the line of the country between Rustchuck and Varna.

"We have stated," they say, "the main sources from whence the traffic of the Kustendjie line must be derived, to be, *the grain trade of the Principalities*. A line from Rustchuck to Varna cannot divert this trade from its existing channels, for Rustchuck is 80 miles above the centre of the discharge of the grain of Wallachia at ports on the Danube, and 170 miles above Galatz, the entrepôt of the Moldavian corn trade.

"Tchernavoda is nearly at the centre of the whole corn traffic on the Danube, and, as above said, the Company, by an inexpensive establishment of tugs, may confidently reckon on diverting to Tchernavoda and Kustendjie, as much of the trade now descending the Danube to Sulina as they can accommodate, a result which it seems impossible profitably to effect by a line from Rustchuck to Varna.

Difference
in dis-
tance.

"According to Mr. Jarrier, the length of a line from Rustchuck to Varna will be about 280 *kilometres*, or upwards of 175 miles.

"The distance from Tchernavoda to Kustendjie is $38\frac{1}{2}$ miles. The distance by the Danube, from Rustchuck to Tchernavoda, is 106 miles.

"Thus there are about 136 miles of very expensive railway to compete with 106 miles of river. The ports reached in the two cases are Kustendjie and Varna. Now it has been argued that Varna, being nearer to the Bosphorus, has a great advantage. The difference of distance, however, is but 70 miles, and with good steamers,

this is but a difference of a few hours; and to sailing vessels it does not make a difference of two days on a voyage from France or England, and back.

"Mr. Jarrier informed Mr. Gordon, that his estimate of the cost of the line from Rustchuck to Varna, leaving Schumla on one side, is equal to about 12,000*l.* per mile. There will, in all probability, be two tunnels—one, three *kilometres*, or 3,300 yards long, the other about 2,200 yards. The bridges, viaducts, &c., will be a very heavy expense, and numerous.

Cost of the
Varna line.

"Considering, then, the great cost of the line, together with its length, it seems to us impossible that it can divert the corn traffic from the Danube and Tchernavoda. But this is the great traffic of the Danubian Provinces: the two projects, therefore, may be considered quite independent commercial undertakings."*

We resume our extracts from Messrs. Liddell and Gordon's Report on the system of the corn-trade in the Danubian Provinces, and the probable traffic which may be diverted to the proposed railway and port of Kustendjie, with their estimates of the revenue thence arising to the Company.

"Grain and tallow," they say, "forming nine-tenths of the export trade by the Danube at present, must probably ever remain the staple of the export of the Danubian Principalities, Servia and Bulgaria. For the inhabitants are strictly

* Report, pp. 12-14.

agricultural, and the country has such a vast extent of rich soil very imperfectly utilised, that for many years at least there is not likely to arise any desire to become manufacturers; more especially if the facilities for import and export keep pace with the rapidly increasing demand arising from increased industry.

Saving in
freights.

"We have already pointed out* that there is a minimum difference of 13s. and a usual difference of 20s. per ton, in freights to Odessa and to the Danube, in favour of Odessa; and that the difference would be even greater in favour of Kustendjie, when made into a safe harbour, with a railway communication with the Danube at Tchernavoda.

Expenses
of the
trade.

"The expenses incurred in bringing the corn of these districts to market are—

1. Trans-
port.

"1. *Transport on the Danube* in kerlaches, or in the schlepps or barges of the Danube Steam Navigation Company.

Freights.

"We may here mention that the rate of freights from Kalafat to Ibraila by kerlaches, ranged for the four years preceding 1853, from 2s. 2d. to 4s. 3d. per quarter, but 2s. 10d. may be taken as the usual freights. The craft perform the voyage, from Ibraila to Kalafat empty, and back with grain, in about *two months*.

"The freight charged by the Austrian Danube Company for conveying grain in their iron barges, towed by steamers, varies according to the season and demand, but may be taken at 4s. per quarter

* The statement referred to is quoted in p. 66 of this *Memoir*.

(30 kreutzers per 100 funti). A steamer performs the voyage in *ten days*.

“The quantity moved last year by the Danube Steam Company was upwards of 500,000 quarters, although the traffic is but recently established, so that the plant of barges, &c. is inadequate to the demand. The saving in the time of sending the grain to market is the great recommendation of this improvement to the merchants and producers. The profit to the Danube Company on this traffic is notoriously enormous.

“2. *Transshipment and warehousing of the grain.* 2. Transshipment and warehousing.

“Upon this subject no positive information could be collected. A warehouse or granary at Ibraila or Galatz is, however, known to be a source of great profit. Some of those at Ibraila are on a large scale, and three stories high. Those at Galatz are of wood, one story high, and not generally adjacent to the shipping.

“The arrangements for shipping are totally devoid of all mechanical aids, and present a scene of the greatest confusion to the eye of one who knows the granaries of our grain marts, or the docks of London, Liverpool, or Hull.

“3. *The passage of the Delta and the Sulina Bar.* 3. Passage of Delta and Bar.

“The information collected as to the expense attending this incident in the navigation of the Danube was pretty full; but the accounts of the positive charges on the grain trade for extra lighterage and haulage, varied from 200,000*l.* a year to 130,000*l.*, and even less. The loss to

Losses by shipowners and shippers by delays and disasters is
delays, &c. incalculable.*

"We have entered into these particulars to prove to you, that, with the means of shipment proposed to be created at Kustendjie in the course of two or three years, it would not be impossible to divert the whole traffic in grain to that port, unless greatly improved arrangements were also introduced at other places of shipment.

"The Committee of subscribers originally appointed to examine this project, reported, in July, 1856, that 'they had ascertained that the entire corn trade of the Danube is in the hands of

* "The following letter from the master of a British vessel gives an example of the expense, &c., involved in the navigation of the Danube to Galatz.

"*Galatz, December 3rd, 1856.*

"We left Kertch on the 4th of November, and arrived at the Sulina mouth of the Danube on the 10th. We have been 24 days in getting up the Danube, having had to track and warp most of the way up. The water in the Danube is low, and lighterage exorbitant. On the Sulina bar there is 10 feet 3 inches, but on the Algani bank only 9 feet; so that we shall have most of our cargo to take out, and the rate of lighterage is now 30*l.* per 100 quarters, or 6*s.* per quarter."

The vessel was 300 tons register, and drew 11 feet 6 inches. Freights at the time were 9*s.* per quarter to England.

The *lighterage falls upon the shipowner*, and is a *reduction on the freight*.

The following minute of charges on the trade in 1851 is important:—

"200 vessels entered the Danube laden: average	£
cost of lighters they required, at 20 <i>l.</i> each . . .	4,000
750 vessels left the Danube laden, requiring	
lighters at 35 <i>l.</i> each	26,250
Towing, &c., at Tulcha	5,000
Total expense . . .	£ 35,250."

the Greek houses ; but as those houses are not interested in the river craft, there will probably be little difficulty experienced in securing their co-operation, more especially as it must be an important consideration with them, that the best possible route to the Black Sea should be constructed and maintained.' The Greek corn-merchants.

“ But without essentially interfering with established routes and vested interests, the very competition for the traffic will give an impulse to the productive powers of the Danubian Provinces which will continue to task the shippers to provide for its export with ordinary dispatch.

“ The advantages of the arrangements to be made at Tchernavoda and at Kustendjie are such, that the traffic descending the Danube, from all points above it, will naturally prefer being discharged at Tchernavoda to going 70 miles lower down, as there will be a direct saving in the expense of river-craft of about 6*d.* per quarter. Better arrangements of the new Railway and Port.

“ There will also be economy in sending grain from Galatz direct to Tchernavoda as soon as steam-tugs can be established for working this traffic against the stream ; for the convenience of the port of Kustendjie will be such, that there will always be immediate dispatch for vessels of every class, and never any risk of lighterage or the other incidental but great expenses of the Lower Danube navigation to be incurred.

“ Seeing, then, that the export of the Danubian Provinces in 1852 was 1,669,000 quarters, of Estimates. Danubian exports.

which upwards of 1,300,000 quarters were from Wallachia and Bulgaria, there seems no room to doubt that as soon as the railway can be opened for traffic and the port to receive ships, the natural development of the traffic will have prepared an amount of about 900,000 quarters for the first year's export by the new port, viz., 600,000 quarters from Wallachia, 200,000 quarters from Moldavia, 100,000 quarters from Bulgaria, and that these quantities will steadily and rapidly increase.

"There are likewise large quantities of tallow, hides, wool, oxen, horses, &c., which would be exported by vessels such as can frequent a port like Kustendjie.

Imports.

"Again, the imports to the Danubian Provinces from France and England must rapidly increase; and this traffic will unquestionably flow in great part through the channels opened by the Danube and Black Sea Railway Company. In coals alone, for the supply of the steam navigation on the Danube and of a district almost devoid of fuel, there will be a great traffic. In heavy goods, colonial produce, earthenware, hardwares, iron castings, tin plates, &c., &c., there must at once arise a traffic of great importance, as the supply will be from France, England, and Northern Germany, and of course at greatly cheaper rates than that now derived from the centre of Europe.

Estimate
of traffic.

"We estimate this source of traffic at 50,000 tons to commence with.

“ We consider, then, that as soon as the port and railway are open for traffic, we may reckon with certainty on carrying—

From Tchernavoda . . . 150,000 tons.

Mejidia or Karasu (the
products of Bulgaria) 20,000 „

170,000 tons.

And we may reckon on importing at Kustendjie about 50,000 tons of various articles, to be delivered chiefly at Tchernavoda, say—30,000 tons of coals, and 20,000 tons of general goods.

“ At an average rate of 12s. per ton for railway, Results.
harbour, and shipping charges, which is certainly a low rate, the receipts would be—

220,000 tons at 12s. . . £132,000

And supposing the working expenses to be even 50 per cent. of the whole receipts, which on such a traffic at the above rate is far beyond what need be reckoned, the profits available for dividend would be 66,000*l.*, or 22 per cent. on the capital of 300,000*l.*, the amount provided for carrying out the proposed works.

“ This estimate, however, is exclusive of all Passenger
traffic.
passenger traffic, and many other sources of traffic which must eventually prove of great value. For instance, we have not taken into account the passenger traffic from the Danubian Provinces to Constantinople, and the ports of the Black Sea; and until a direct line to Constantinople from

Traffic
between
Central
Europe
and Asia.

Belgrade is carried out, the Danube and the proposed railway affords the shortest and easiest route from the west of Europe to Constantinople. From Vienna to Tchernavoda it is now only four days by rail and steamers, and this time may be reduced by improving the channel of the Danube from Drenkova to Thurm Severin. The time from Kustendjie to Constantinople is under eighteen hours by a good steamer; so that the whole journey from Vienna to Constantinople might be effected with comfort in five or six days. From London and Paris the time would be only eight or nine days. Again, the traffic between Central Europe and Trebizond, the port at which the great caravan routes from Central Asia terminate, cannot but largely swell the amount of goods to be carried, and by the establishment of a good line of steamers this traffic may soon become of vast importance.

“The journey down the Danube from Vienna is at present carried on by the Danubian Steam Navigation Company in a most efficient manner. The boats are clean and good, and the service is well performed, the only drawback being the inconvenience of passing the rapids of the Danube. From Drenkova down to Thurm Severin, (a total distance of fifty miles,) when the water is low, the large steamers are not taken through the shoal waters, and passengers and luggage are transferred to small steamers and barges, in which they are conveyed to Juc—re-transferred there to

larger steamers, and carried to Orsova, whence they go overland, or in boats and barges, to Thurm Severin, where one of the large steamers of the Company is in waiting to carry on the passengers, luggage, &c., to Galatz.

“If the improvements in this part of the Danube were carried into effect, as might easily be done, there is no doubt that an immense trade from the Upper Danube and its tributaries might gradually be opened, not only with the provinces on the Lower Danube, but also, by means of your railway and the harbour of Kustendjie, with the East generally; and there is as little reason to doubt that the profits to be derived from it will enable you to extend your capital in meeting the requirements of trade to an amount much beyond what it is now contemplated to expend.”

SECTION X.

EMIGRATION.—*Settlers required in the Danubian Provinces.—The facilities greater than to America or Australia.—The British element.—Statistics of Irish and German emigration.—The Germans good colonists.—Driven from their homes.—Movement from Central Europe.—Can it be turned to the East?—The route of the great rivers that of myriads in the crusade.—Valuable results of emigration.*

Population
scanty.

Bars to
coloniza-
tion.

The bars
removed.

THE Report of Messrs. Liddell and Gordon states that a secondary, but very important, object of the promoters of the Black Sea Railway and Port is to induce a return of population into the Dobrudscha and Eastern Bulgaria, naturally one of the richest districts of Europe for the production of corn and the rearing of sheep, oxen, and horses. "Some years ago," observes Captain Spencer, "the Government of Moldo-Wallachia promulgated the *Réglement Organique*, allowing foreigners to become naturalized, and purchase land; which undoubtedly offered strong temptations to strangers to settle in a country where land might be had at nearly the same price as in the back settlements of America. But what man from the civilized West," adds Captain Spencer, "would seek a home in a country of which Russia is the protector—or in Turkey, as long as her legislature persists in denying political and social rights to a Christian?"

The removal of these bars to the infusion of new life into the stagnant system of the Ottoman

Empire has been one of the happy results of the late war. "This done," continues Captain Spencer, "it is more than probable that multitudes of industrious men, of every trade and calling, from the civilized West, would settle in countries offering so many advantages."*

But while great masses of the population of several of the old European countries, natives of England, Scotland, Ireland, and Germany, abandon their homes in quest of remunerative employment for their labour and capital in the forests of America or the wilds of Australia, it seems hitherto never to have occurred to any one that the resources of our own quarter of the globe, so far from being exhausted, have never been explored.

Surely, some branch of the great stream of emigration might be diverted to countries offering the adventurers equal or greater advantages, with less trouble, danger, expense, and waste of time than attend the voyage to America or Australia. After what has been stated with respect to the soil, the climate, and productiveness of the plains washed by the Danube and its tributaries, it is needless to enlarge on the advantages of colonization in this quarter to the emigrants engaged in it. We may add, that their skill and industry, with the force of example, could not but have a stirring effect on the native population. The result of all would be an in-

Emigra-
tion to
America
and Aus-
tralia.

Can a
branch be
turned to
the East?

* *Turkey, Russia, &c.*, pp. 133, 134.

creasing demand for the products of the mother country. "The first step in a country," says Adam Smith, "is agriculture; and whatever tends to increase the production of the produce of the soil must create value, and value creates wants, and wants create trade, and thus commerce."

The
British
element.

- Not that we feel sanguine of the British element entering largely into this new course of emigration. Our emigrants, particularly of the lower classes, follow the beaten tracks. They have kinsmen and friends across the ocean, beckoning them over, and, in numerous instances, supplying the means of transport. In the Far West, and at the antipodes, they find the language and manners, institutions and religion, all, of the old stock. It would be difficult to enlighten the popular mind on the real aspect of countries, of which it is only known that they have been debateable ground between the Turks and the Russians; if, indeed, so much has been recently learnt from a British army having encamped in Bulgaria. The more respectable of these classes, family emigrants, would revolt from the idea of settling among a people alien in race, religion, language, customs, and laws.

Still it may be expected, that in the course of time, British enterprise will even penetrate among the scattered population of the Danubian Provinces. In the first instance, the works connected with the harbour and railway at Kustendjie must require some skilled artisans, part

of whom may be tempted to settle in a country offering many advantages. Thus would be formed the nucleus of an English settlement. Their reports may attract others to join them from home. With the works completed, communications opened, and order established, capitalists may be induced to invest in land, and send out colonists. These, doubtless, being carefully selected, would be of a class less liable to be deterred by ignorant prejudices. In these countries labourers are not so much wanted, as persons of intelligence as well as industry,—small farmers and others possessed of some means.

Thus an impetus would be given from avowedly the finest race of colonists in the world—from the best school of agriculture, to the improved cultivation of the soil and other handicraft of the natives, already roused, as appears by the returns quoted in a former Section, to extended cultivation. Better implements and processes of husbandry would be introduced, and at least a sprinkling of neat English homesteads would take the place of the mud huts and rush hovels of the Wallachian and Bulgarian peasants, and form models for their imitation.

The French, lately our rivals in arms, are said to view with jealousy industrial projects which may give us a preponderating influence in the territories of Turkey. But the French have no genius for colonization; and if all the fostering care of their Government has failed in tempting

The
French not
colonists.

agricultural settlers to Algeria in any considerable numbers, it is not probable that they will contribute, in any appreciable degree, to the colonization of the East of Europe.

German
colonists.

The current of emigration which it would be least difficult to turn towards the Danubian Provinces is that which derives its source from the different German States ; and, from our own observation, we are inclined to reckon the Germans scarcely inferior as colonists to the natives of Britain. They are of the same aboriginal stock, patient of labour, frugal, orderly, and persevering. Besides, the German is pre-eminently the man who considers, with the Greek tragic poet, that country to be his own where he can best live ; or, as it is shortly expressed : *ubi bene ibi patria*.

The statistics of emigration remarkably exhibit the tendency of the Germans to better their condition by seeking new homes in the Far West, even at the cost and suffering of a long sea voyage, and a toilsome pilgrimage, perhaps on both sides of the Atlantic.

German
immi-
grants to
the U. S.

As early as 1830, according to an analysis of the census of the United States made by Professor Tucker, of Virginia, the Germans had contributed one-tenth to the population. This relative proportion was maintained in 1850, as appears by an estimate of the total gains of the United States by immigration from Europe, with the natural increase to that time.

The white population was then nearly

20,000,000, of which 14,000,000 were of English blood, 2,000,000 Celtic - Irish, and 2,000,000 German.

Every one has heard of the prodigious Irish ^{Irish emi-}emigration to America, which attained its maxi-^{grants.} mum in 1851, when it amounted to 254,537 souls; the average of the five years from 1849 to 1853 being upwards of 222,000.

From the returns for the year 1854, laid ^{German} before Congress, it appears that the immigrants ^{compared} into the United States from Ireland have re-^{with Irish.} markably decreased, while those from Germany have as remarkably increased. The aggregate number of emigrants arrived from all parts, in that year, was 460,474 persons, of whom 328,000 were landed at New York. Of these, 49,000 were from Great Britain; 101,606 from Ireland; and 206,500 from Germany.

“In reference to the numbers from Ireland and Germany, a writer in the *New York Herald* of 27th February, 1855, observes: “This is a remarkable revolution. Down to the last year or two, the Irish exodus far exceeded that from Germany and all the Continental States put together. Now we find the movement from Germany alone more than twice as large as the shipments from Ireland, and a third larger than the aggregate exports of all the British islands combined. On the other hand, our accessions amount to 13,000 from France and 13,000 from China; the Chinese coming in at St. Francisco,

and the French mostly at this port. These are curious and suggestive facts.

“ But the most striking feature of these figures from the State department, is the overwhelming and increasing strength of the Germanic, and the marked decline in the Irish, immigration. Why is this? We presume that the dangers of a continental war, the pressure of taxation, the temptations of political and religious liberty, and our rich lands in the West, are bringing over this mighty influx of the Teutonic and Saxon tribes. The great decrease from Ireland, on the other hand, is partly due to the fact that old Erin has been exhausted of her heavy surplus by emigration, heretofore caused by famine; that there is more work and more bread for the remainder at home; and that there is a hope, though vague and indefinite, that something may turn up for Irish independence one of these days.

“ At all events, the Irish exodus is rapidly subsiding, while that from Germany is rapidly swelling from month to month. Should this Russian war continue a year longer, our reinforcements from Germany will probably be equal to 300,000 or 400,000 souls. Assuming that it will be 300,000, and that each German emigrant, including cash and baggage, is equal to the addition of 200 dollars to the active capital of the country, our German reinforcements of this year will be equivalent to an addition of

60,000,000 dollars (1,287,730*l.*) to our national wealth and prosperity."

About the same time, the *Times* correspondent transmitted a copy of a letter written by the Mayor of New York, containing severe strictures on the conduct of the Governments of Belgium, some of the German States, and Switzerland, in ridding themselves in the cheapest and easiest way of their pauper and criminal population, throwing the burthen, which was becoming serious, on other states.

"In Switzerland," he says, "the principle of self-preservation from the evils of pauper and criminal emigration are fully understood. The villages and communes are far more jealous of their own local interest, even against each other, than we have shown ourselves against foreign nations.

"A pauper resident in one canton is not permitted to become a resident in another. Every one visiting in another canton, even under the plea of looking for work, is closely watched, and the passports and papers with which he must always be provided are strictly examined. The same, even to a greater extent, is the case in Germany. No one dares to venture into a neighbouring state without a passport and other requisite papers; and if he be found destitute,—for on the border of a country every one must show a certain sum of money,—he is immediately ordered back, and, if necessary, forcibly transferred by the police, lest by entering he should become a public charge.

"This appears to be the domestic policy of these countries towards each other, while they have no compunctions of conscience in regard to our rights, in transferring these outcasts to our care. However they contend with each other as to the case of these unfortunates, they appear to make common cause in saddling them upon us."

However objectionable may be the action of these Governments in ridding their states of a pauper and criminal population, and whatever objections may be entertained to the classes of emigrants receiving Government aid—perhaps without much reason, as emigration generally becomes a purifying and self-supporting process—two important inferences may be drawn from the statements quoted.

Movement
from
Central
Europe.

First, that there is a great movement from the central states of Europe towards countries offering better prospects, and in the desire to escape the petty thralldom to which the poor are exposed even in nominally free states. If emigration were not popular, government efforts to extend it would be inoperative.

Emigrants
of a better
class.

Secondly, we gather from the American calculations that at least a very considerable proportion of the German immigrants to the United States are of a class possessed of some means, even after the charges of their passage and land journey are defrayed. And this is notorious from the circumstances of vast numbers of the German emigrants who ship themselves for America in the ports of Liverpool and Hamburgh.

It would seem, then, not very difficult to turn the current of this emigration into the Danubian Provinces, if only it were generally known that the same or greater advantages may be obtained by a migration comparatively cheap and easy. Thus would the Roumanian people draw their brethren of Germany from emigration to the distant West of America, and the tide of population, after flowing westward for 400 years, be turned back to the East.

We need only point to the channel of communication afforded by the Danube from Ulm to Tchernavoda and Brailow, to show with what facility German emigrants, their families and effects, may be transported to the provinces inviting their labour; the Rhine and other rivers of Germany being subsidiary to their transit in its early stages.

It was along the banks of these two great rivers that "a mixed multitude" of 200,000 pilgrims, the very refuse of the populations of the West of Europe, but principally Germans, and of every age and sex, without resources and without organization, made their way towards the shores of the Propontis in the first season of the Crusade. Peter the Hermit fixed the rendezvous at Cologne, and, following the course of the rivers, this needy and undisciplined band of adventurers was compelled, between the frontiers of Austria and the Byzantine empire, to traverse the wild countries of Hungary and Bulgaria. One-third part only

River
route to
Eastern
Europe.

The Route
of myriads
of pil-
grims.

of this disorderly band—which anticipated the march of the organized chivalry of the West—escaped the retaliation their aggressions merited, and arrived under the walls of Constantinople.

Archbishop Baldric estimated the whole number of pilgrims, bearing arms, besides women and children, who, in successive divisions, set forth on the Crusades, at 600,000 men; the great body of whom pursued the same route as the followers of Peter the Hermit. Seven centuries ago, this was the toilsome track of myriads led on by a wild enthusiasm which set all obstacles at defiance. Why should it not now, stripped of its difficulties, and with increased facilities meeting the demand, become the highway of multitudes, at the powerful call of self-interest, to the rich plains of the Danubian Provinces? Those provinces are now in the course of an orderly settlement, under the guarantee and protection of the Great Powers, and the port and railway at Kustendjie will open markets for their produce.

German
emigration
eastward.

The connexion between the people of Germany, as an emigrating race, and the territories with which they are connected by the Danube, is obvious. On this source, especially, we may fairly reckon for the increase of population, and of moral and industrial progress in the countries embraced in the intended operations of the Port and Railway Company. The calculations given in a former Section, on which the estimate of profits is based, are in nowise dependent on any

particular influx of settlers. The scheme rests on its own merits. In some way or other, improved channels for the transit and shipment of produce will be met by a corresponding increase, and a correlative interchange of marketable commodities. Success, however, may be enhanced by an infusion of the German race which appears so natural and probable; and we do but justice to the enlightened views of the projectors of the undertaking when we venture to affirm that they anticipate with lively satisfaction the advance of civilization in the country marked out for the sphere of their operations, and the opening of new fields on which the straitened populations of other states may find scope for their industry and intelligence, and, with happy homes, confer reciprocal benefits on the land of their adoption.

“We should very much wish,” observes one of the founders* of the Company, “to impress upon the minds of people of influence in Germany, that it would be most humane to encourage emigration to the states eastward of Germany, and particularly to countries bordering the banks of the great rivers, since they offer such abundant sources of profit for labour. These countries they may reach in a few days with their wives and families, and their small capitals may at once be usefully employed, instead of flying to America, and, with

* Mr. Thomas Wilson, to whose little work on the *Lowlands of the Danube*, we are indebted for some of the observations introduced into this Section.

empty pockets, after a voyage and detention of many weeks in duration, undergoing further delays before they can be housed. Many emigrants have not been settled under eighteen or twenty weeks.

“ Were this picture of avoidable loss and misery truly laid before the German people, there would be a diversion towards the Danube. Every German philanthropist who assists in spreading the knowledge of the sufferings his countrymen undergo on their transatlantic emigration would earn the approbation of all Europe.”

SECTION XI.

STRATEGICAL IMPORTANCE OF KUSTENDJIE.—*Ideas of Trajan and Napoleon.—The chain of fortresses on the Danube.—Russian campaign of 1828-29.—Kustendjie falls.—Molike's account.—The value of a fortress and harbour in this position.—Memorandum by Lieut.-Colonel Biddulph, R.A., on its capabilities, and the works required.*

It would appear, from a passage in M. Thiers' *History of the Consulate and Empire*,^{*} quoted in a former Section,* that the first Napoleon,—while he counselled the Turkish Government to cede the Principalities to Russia, considering the Porte unable to hold them much longer,—was prepared to resist the Russian pretensions to advance the frontier of Bessarabia to the Karasu Valley and Kustendjie.

Trajan and
Napoleon's
ideas.

Its strategical importance, as the base of future operations on the line of the Danube, and the value, especially, of the port of Kustendjie for landing supplies and the *matériel* of war, was effectually proved by the Russians in the opening of the campaign of 1828, as we shall presently find.

It appears to have been their cherished policy to secure its possession as the first step towards further aggressions against the integrity of the

* See note at pp. 49, 50, Sect. iv.

Ottoman Empire ; and, although Napoleon seems to have considered the Danube as the natural boundary of Turkey Proper, he could not have been ignorant how ill it was protected along the lower course of that river ; how open the Dobrudscha was to Russian inroads. His eagle glance had penetrated the importance, in all respects, of the position of Kustendjie, and had it been the frontier of his own empire that was menaced, we cannot doubt but long ago the place would have been fortified, the harbour improved, and modern works, restoring the line of defence of Trajan's Wall, would have again interposed a barrier to the incursions of Scythian hordes. But as matters stood, Napoleon contented himself with endeavouring to save it from the grasp of the Russians, by offering his guarantee to Turkey of her frontier on the Danube.

Thus, after the lapse of sixteen centuries, we find the ideas of the two emperors—both men of the highest genius, perfect masters of the art of war, and resembling each other in a variety of points—coinciding in the views they took of the importance of this position.

It cannot, however, be too often repeated, that the great value of the position is derived from its resting on the sea. The place, in itself, is too much isolated to form a *point d'appui* to the other Bulgarian fortresses, or receive support from them. With the port rendered capable of receiving transports and ships of war, at all sea-

sons, it would become the key of the whole of them to a Power commanding the Black Sea. Different as the modes of warfare were in ancient times, the value of naval co-operation was well understood. In the first period of the Roman Empire, the coasts of the Euxine were guarded, and the communications kept open, by a fleet of sixty ships ; and we may easily conceive that the ancient moles of Kustendjie—connected with its rampart and the line of defences extending to the Danube—sheltered the moorings of the Roman triremes on the station, commissioned to succour the garrisons of these defences.

Defended as the frontier of Turkey Proper on the Danube is by a chain of strong fortresses on the right bank of the river, extending from Widdin to Silistria, there is none of any importance below Silistria. Consequently, the Russians, in their invasions of Turkey, have chosen to cross the Danube much lower, notwithstanding greater natural impediments to the passage of the river, and the difficulties attending the march of large bodies of troops through the Dobrudscha. The chain of Turkish forts is, indeed, continued as low as Tultcha, on the St. George branch of the Danube. Hirsova, Matschin, Brailow, Izaktchi, and Tultcha, are all situated at the points where the stream might otherwise most easily be crossed. But their fortifications are described by Moltke as, “according to European ideas, of the most miserable description.” In fact, with the excep-

Fortresses
on the
Danube.

Campaign
of 1828.

tion of Brailow, which, though destitute of out-works, was long and gallantly defended by the Turks, none of these places offered any serious resistance to the advance of the Russian army in the memorable campaign of 1828.

Moltke's
Account of
Kus-
tendjie.

Kustendjie surrendered with equal precipitation. It will not be foreign to our purpose to quote Baron von Moltke's description of the place and its fate. "Kustendjie stands upon a point of land, so that on three sides it is defended by the sea, and by chalk cliffs upwards of 100 feet in height, and too steep to be scaled; and is only therefore accessible from the west. The total absence of safe harbours on the western coast of the Black Sea gives importance to that of Kustendjie, bad as it is, especially for an army whose operations are directed upon Varna. In 1828, the population of Kustendjie was about 2,000; now," [the greater part of the town having been demolished by the Russians during their occupation]—"it does not contain above forty inhabited houses.

"The Turks had defended the side towards the land, only 500 paces in width, by three bastions and short curtains; the ditch was faced with stone. The old Roman embankment, which connects Trajan's wall with the sea, and now affords a ready approach to the fortress, ought to have taught the Turks how to lay down their lines so as to command the ground. At any rate, the three hillocks at the northern corner ought to have been taken

into the fortifications. A detached outwork upon the rear had been erected on one of them, but it could not be supported from the fortress.”*

“One consequence of the capture of Brailow,” says Baron von Moltke, “was the fall of Isaktchi and Matschin, and of all the other places of the Dobrudscha. Hirsova, Tultcha, and Kustendjie were invested and bombarded by very distant and weak batteries, which effected little against these places. They were uninjured, and well provided with all kinds of stores, when they offered to capitulate on hearing of the fall of Brailow. Kustendjie sent messengers to ascertain the truth of facts on the spot. But by the time they reached Baba-Dagh, these gentlemen were quite convinced by the heat and difficulties of their ride, and returned with the confirmation of the intelligence.”

Kustendjie surrenders to the Russians.

“On the 5th of July all the fortresses on the Danube from Silistria downwards were in the hands of the Russians, who were masters of the whole country as far as Trajan’s Wall. A transport fleet of twenty-six sail, laden with provisions and warlike stores from Odessa, entered the conquered harbour of Kustendjie.”†

After the fall of these fortresses, the Russian army remained inactive for eight days in the strong and easily defensible position of Tchernavoda, behind the marshes and lakes of Karasu,

Position near Karasu.

* Von Moltke’s *Campaigns of 1828-29*, p. 75.

† Ibid., pp. 103, 104.

the Emperor himself having advanced with the main body upon Karatai, close to Trajan's Wall.*

"These obstacles," says Baron von Moltke, whose account of the opening of the campaign of 1823 we are still following, "can only be avoided by taking a circuit nearly twenty miles to the east. In order to operate along the sea-coast, and to base the support of a column upon the fleet, it is essential to have possession of the strongholds upon the sea-shore — Kustendjie, Mangalia, Kavarna, and Baltjik."†

The line from Kustendjie to Silistria, we are here informed, was the first strategical movement

* Baron von Moltke mentions in a note, in order to refute, the idea of a branch of the Danube having formerly taken this course to the sea, a subject discussed in Sect. iv., pp. 49, 50 of this Memoir. We subjoin the Baron's note:

"These [lakes] have been erroneously supposed to be a choked-up branch of the Danube, a supposition upon which the project of a canal to Kustendjie was founded. According to the survey made by Major von Vinke, of the Russian staff, in 1837, the lowest point of the valley of the Karasu, between Kustendjie and its commencement, is 164 feet above the level of the Black Sea. As there is not a drop of water to be found on the high ground, the canal would have to be cut to that depth through a bed of limestone rock—evidently an impossible undertaking." Von Moltke's *Campaigns in Turkey*, p. 76. Of course the difficulty could be surmounted by tunnelling, a system of locks, or a combination of both, should circumstances hereafter warrant the Company's resumption of the promoters' original design of a canal. By this means boats loaded on the Danube with grain and other bulky commodities might discharge their cargoes on board ships in the port of Kustendjie, saving the cost of unloading and reloading at Tchernavoda for transit by the railway. At present, however, as already stated (p. 51), the railway is the most practicable undertaking. It can be constructed without delay, and at the least expense.

† Von Moltke, p. 77.

intended by the Russian commanders, and formed the basis of future operations. Their position was equally suited for an advance on Varna and Schumla; which, controlled by circumstances, was the course taken. Anyhow, as the Baron has just observed, it would have been impossible to advance with Kustendjie held by the enemy in the rear. Kustendjie, then, with the camp on the Karasu lakes on the one hand, and the harbour occupied by the fleet of transports supplying provisions and the *matériel* of war, on the other, was the pivot of the Russian movement.

The strategical importance of the position of Kustendjie, both as a fortress, and, when improved, a harbour for transports and even ships-of-war, could not escape the attention of the Turkish government. Its fortification is reserved to the Porte in the Concession granted to the Harbour and Railway Company; with the proviso that the works are to be constructed at the expense of the Government.

Nor can the Directors of the Company, taking large and comprehensive views of its results, although the undertaking is strictly commercial, be insensible to the political, as well as the moral, advantages with which it may be attended. Peace now reigns in Europe—a peace which, we trust, may be lasting. Turkey, instead of receding on the line of the Lower Danube, has again advanced her frontier on the left bank of

Kus-
tendjie
to be
fortified.

Peace or
War?

the river, the integrity of the Ottoman Empire receiving a European guarantee; and it may be hoped that means will be found of establishing a system of government in the Principalities which will secure those fine provinces from the demoralizing effects of Russian intrigue.

But has Russia no *arrière pensée*, while accepting the conditions of peace to which she has been compelled to submit? Has she finally abandoned her long-cherished policy, her dreams of planting the Cross on the ruins of the Ottoman Empire? Many thoughtful men doubt it. They ask, For what purpose does she seek to extend purely military lines of railway through her southern provinces? Why does she originate an immense flotilla of steam ships in her ports of the Black Sea which can have no merely commercial object or success? Does she watch her opportunity, in some dislocation of the present political system of Europe, and the formation of new combinations, more favourable to her pretensions?

Should ulterior designs, hostile to the integrity of the Ottoman Empire, be still secretly entertained by Russia, or revived under a change of counsels and more promising auspices, there are two modes by which, best, they may be rendered abortive. On the one hand, it is a very general opinion that the aggressive spirit of Russia, no less than that of other states,—her crusades on Turkey fostered by an ignorant fanaticism—will

be extinguished and give way before the advance of civilization among her people, when enlightened by a freer intercourse with the rest of the world, and enriched by the gains of increasing production, stimulated by foreign demand, and, even, by the peaceful rivalry of commercial enterprise.

But it is within the scope of the legitimate ^{Works of Peace.} operations of the Kustendjie Company, having its seat so near the verge of the Russian frontier, to contribute to this happy result. Directly, they tend to withdraw the Moldo-Wallachian Principalities from the influence of Russia, and thus remove a stepping-stone to her pretensions beyond the Danube and the Balkan. Indirectly, the Company's operations may have a beneficial influence on their neighbours in the Holy Empire. There will be the force of example; and, Odessa and Kustendjie becoming commercial rivals, the former can only hope to maintain her superiority by means of improved communications and culture, similar to those promoted on the other side of the frontier. Thus civilization will penetrate into the heart of Bessarabia and the other provinces of Southern Russia; and, with it, aversion to aggressive war, and the desire of maintaining peaceful relations with foreign states.

On the other hand, should Russia still cherish ^{Military Works.} her ambitious projects, the re-establishment of Kustendjie—the position fortified and the harbour improved—would prove a serious check to her designs of conquest. It is in the interest of

a lasting peace that Kustendjie should be fortified: *si vis pacem, para bellum*—a well-known maxim lately quoted by our First Minister, on moving the Army Estimates. With a fortress so placed as Kustendjie, resting on the sea, closing, as we may say, the door of the Dobrudscha, hitherto the most exposed inlet on the Turkish frontier; commanding the strong position of Karasu and Tchernavoda; and flanking the great line of fortresses on the Danube which the Turks have shown themselves so well able to defend—the court of Russia might well pause before it plunged into hostilities which would be met at the very outset by such defences.

Reserved
to the
Porte.

Towards strengthening this barrier, the Company incidentally contributes the improvement of the harbour, on which the value of Kustendjie, as a strategical position, so much depends. Its fortification will become the affair of the Turkish government, alive to its importance. It is not for us to anticipate the plans by which their engineers may carry the measure into effect. But having endeavoured to convey some idea of the value of the position, we feel that something may be wanting unless we can also show the practicability of the works required for its defence. This we are enabled to do from a Memorandum drawn up by Lieut. Colonel M. A. Biddulph, R.A., whose reconnaissance of the country about Kustendjie has been already mentioned, and whose opinions on the position and

The Works
practicable.

fortification of Kustendjie, formed from observations made on the spot, are entitled to confidence.

MEMORANDUM BY LIEUT. COLONEL M. A. BIDDULPH, R.A., ON THE STRATEGICAL POSITION, AND THE FORTIFICATION, OF KUSTENDJIE.

“ Bulgaria has only one fortress on its sea-coast—Varna, which has no harbour where heavy *matériel*, or even merchandise, can be landed or shipped at all times of the year. The bay of Varna is an open roadstead, not possessing even the advantages of natural shelter from the most prevailing winds; during which, when they are of more than ordinary violence, there are always instances of vessels driving from their anchors and being cast on the sandy beach. Nothing has been done to form anything having the slightest pretension to the character of a port. All disembarking and shipping has to be done in boats and barges, the difficulties attending which, with winds varying from N.E. to S.E., are insurmountable as the place now exists. Having witnessed every step of the disembarkation of the allied armies, as well as their embarkation a few months afterwards, in 1854, I am capable of giving an opinion on the subject.

Colonel
Biddulph's
Memo-
randum.

“ The port of Varna would require a far greater outlay than Kustendjie to make it equally good. This I have reason to believe is Captain Spratt's

opinion. But the interests of the two places are different in every way. That they are so commercially, I have pointed out in another communication. In a strategical point of view, Varna would be a *point d'appui* to Shumla, Rustchuk, and Turtukai, provided the proposed line of railway in that direction be constructed. Varna might well be converted into a fortified harbour for this purpose. But once the line of the fortresses on the Danube passed, means would be found of turning both Shumla and Varna. The line of rail would be gone; and Shumla, if not taken, might be masked, and the defiles of the Balkan would be the real line of defence where the final struggle would be made. Varna, in advance of this line, would then be as useless as Kustendjie after the Danube was crossed, and the fortresses on its bank had fallen.

“Baltjik, Kavarna, and Kustendjie are other points on the coast where, in fine weather, *matériel* may be shipped. Of these, Baltjik was found most convenient by the British Commissariat. Here communications could be carried on between the ships and the shore, when at Varna it was impossible; and there is a roadstead better protected than that of Varna. It has not, however, a site suitable for either a strategical position or a commercial port.

“Kavarna has, in these respects, less importance than Baltjik.

“A glance at the map of the Danubian Pro-

vinces, including Bulgaria, will show the remarkable position of Kustendjie for completing the line of fortified places commencing at Widdin and, —stretching along the south bank of the Danube —ending at Silistria, the extreme right of the Turkish line of defence.

“ The importance of carrying on this chain of forts till its right rests on the sea, does not admit of the slightest doubt. Kustendjie, formed into a magnificent port, as it easily may be, and well fortified, would be a *point d'appui* on which all the chain would rest. How this would strengthen the whole line of defences is evident.

“ Masters of the sea—as I assume the Turks would be in case of rupture with Russia, from their relative position in regard to naval forces in those waters under the Treaty of Paris—the Turkish fleet would have a safe and capacious port at a point where, in case of war, it would be *first* required. And, supposing the line of the Danube to be held during the first summer's campaign, as it certainly would, the importance of a harbour for the fleet and a *point d'appui* to the army, from whence provisions for its subsistence and the *matériel* of war could be drawn, as from an inexhaustible source—because in connexion with Constantinople by sea—must be evident to the most unmilitary mind.

“ The ancient bravery of Turkish troops in the defence of fortresses, and the obstinate struggles

they have always made under greater difficulties than they would find in the advance of Russian armies to force the line of the Danube, are matters of history. But to prove the high capability of the Turkish soldier for this fortress warfare, one has only to recall recent events during the late war. There was the gallant repulse of the Russian columns of attack at Arab Tabia, closing the defence of Silistria, when regularly invested and besieged by the Russian army. Later, we have the victorious repulse of an attack, in great force, on Eupatoria; and the defence of Kars, with the engagement in which the Turks were eminently the victors.

“The port of Kustendjie, being open for fleets all the winter, the movement of troops might take place at any season, commissariat stores might be drawn and reinforcements thrown on any part of the line. The port established and a line of rail conducted to the Danube at Tchernavoda, and the means of unshipping and transporting *matériel* being thus secured, the communication would of course be extended by means of a good road to Rassova and Silistria; and an army would thus be able to move to its flank without difficulty. The Danube terminus of the line of railway would be easily put in a state of defence.

“The whole of the point now occupied by the village of Kustendjie, from the line of the Roman entrenchment, should be reserved as a fortress,

inclosing the arsenal, &c., and Government buildings. With this view, the ground reserved for Government wharves will be nearest the Point.

“ As regards the construction of the works at Kustendjie, the form of the ground is particularly adapted for defence on the north side, where, at about a mile from the present village of Kustendjie, the land begins to fall away to the lake called Fresh-Water Lake. As Kustendjie abuts on the coast, the *enceinte* of works would assume a semi-circular form, taking care to trace them, on the north side, from the crest of the position falling towards the lake. It might, however, be desirable to occupy the highest point on the line of rail, which is situate at about three miles from the port. This point has no elevation of such importance as to give much advantage even if it were secured by the enemy. The ground rises gradually, forming nothing like a position. It would, however, quite come within the limits of the defences of the place, and might be occupied by an outwork off the *enceinte*, through the centre of which the line of rail would pass.

“ Outside this *enceinte*, the country is generally level, with a wavy surface extending to the westward, where it falls away to Alikapu : to the north-west it is intersected by a valley leading down to the Karasu valley. As to the line of rail, should it ever be contested, it is commanded by a range of heights along the south side of the valley remarkable for their boldness.

“ With regard to the nature of the soil, it may be stated that masonry would not be required either for the land defences or the cliff batteries. The soil will stand without *revêtement*, at an unusually steep angle, as appears from the cutting on the French road. The ditch would be cut out of the soil, having slopes which, if carefully arranged so as not to be injured by water, would stand any length of time at an angle rendering escalade difficult.

“ On the mole there should be width enough to allow of a powerful battery, which might be extended along the whole line, if thought necessary. On the cliff should be batteries of earth, which would never be touched by any fire from the sea.

“ As it is intended to run out a mole from the extremity of the points defending the northern entrance to the port from the gales proceeding from that quarter, this would be a good position for a double-tier casement battery sweeping both ways, and, particularly, flanking the entrances to the port.

“ The garrison of Kustendjie should have water, independently of its being brought from without the town, either from the Danube or the lake; and besides the wells which, sunk at any point, always produce an abundant supply, there might be large government catches for water, and tanks similar to those for the supply of the garrison of Bermuda, where there are no springs.

“ Having visited Kustendjie, and examined it

carefully, I feel assured that the opinions I have formed on its strategical importance and capabilities of defence are well founded. I repeat, in short, what has been already stated in the course of these remarks : the sea being held, Kustendjie could not fall while defended by the Turks with their accustomed bravery ; and a ready means would thus be afforded of assembling at once a powerful force at a point from which a flank movement might be made on an enemy's army advancing southward.

“ M. A. B.

“ *Constantinople, 16th Dec. 1856.*”

SECTION XII.

ANCIENT COMMERCE OF THE EUXINE.—*The Argonauts.*—*Greek colonies.*—*Trade with Central Asia.*—*Power and influence of the Genoese in the Middle Ages.*—*Their colony at Pera.*—*They engross the commerce of the Black Sea.*—*Its decline.*—*Revival and prospects.*—TRAVELLING in the Danubian Principalities.—*Their attractions.*—*Convenience of Kustendjie to travellers.*—*Antiquities in the neighbourhood.*—*Further notices of Tomos.*—*Conclusion.*

Kustendjie
the link
with N.W.
of Asia.

It is far from improbable that Kustendjie, with its short line of railway, will eventually form the central link of a chain of steam communication between the countries in the heart of Europe and the south-western coast of Asia; of which Vienna and Trebizond will be the termini. Trebizond, the ancient Trapezus, has from very early times been the focus of a valuable trade with the interior of Asia and the East, which still subsists. Our own Indian commerce brings us the produce of the East through new channels, from which it is not likely that much of it will be diverted; but British commercial enterprise is ever seeking fresh outlets, and there is no saying where it will not penetrate when occasion offers. At present, the commerce with central Asia is principally engrossed by the Germanic States, taking the route of the Danube and the Black Sea, under what disadvantages, any one who has perused these pages will be at no loss to imagine.

If we look at this sea on a map of the world, it appears happily situated, not only for commerce in the various productions of the European countries whose shores it washes, but for affording easy communication between Europe and the north-western parts of Asia. The probability of the revival and augmentation of the ancient trade of the Euxine was slightly touched on at the close of our last Section, but the whole subject is possessed of considerable interest, and merits further notice.

Ancient
commerce
of the
Euxine.

The first sea voyage of which we read in profane history was performed in the Euxine Sea. The Argonauts embarking at Colchos, in the bay of Pagasis on the coast of Thessaly, sailed to Colchis at the eastern extremity of the Euxine, and, as it appears, visited many other places on that coast.* This voyage is remarkable for its

The Argonauts.

* Among other places, the Argonauts are said to have touched at Tomos, near the site of Kustendjie. Ovid has preserved a tradition which derives the name of *τόμος*, "cutting" (a *τέμνω*, "seco"), from an event which occurred on that spot. The Argonauts being followed by Æetes, king of Colchis, in pursuit of his fugitive daughter Medea, carried away by Jason, she tore her brother, the companion of her flight, limb from limb, scattering the remains to elude pursuit while her father was collecting them.

Ovid says that a colony from Miletus settled there in after times, but that the name is connected with the slaughter of Absyrtus.

"Huc quoque Miletī missi venere coloni
Inque Getes Grajas constituere domos.
Sed vetus huic nomen, positaque antiquius urbe,
Constat ab Absyrti cæde fuisse loco."

Then, after relating the circumstances, he concludes:—

"Inde Tomi dictus locus hic; quia fertur in illo
Membra soror fratris præsecuisse sui."

Tristia, Eleg. 9.

Mr. Falconer, the editor of Arrian, gives a more prosaic turn

length, as well as for its antiquity, extending the length of $14\frac{1}{2}$ degrees upon the Equator, or more than 1,000 English miles.

The professed object of this expedition was the acquisition of gold. Strabo* and Appian state that the story of the golden fleece was derived from the practice of the Colchians to spread fleeces of wool across the beds of the torrents that descend from Mount Caucasus, and by this means entangle the particles of gold washed down by the stream. This mode of collecting the metal is said to be much the same as that now practised in the rivers on the coast of Guinea; and thus Colchis was regarded as the Gold Coast of that early period. However this may be, the story of the Argonauts probably arose out of accounts of commercial enterprises made on the coasts of the Black Sea, though the manners of those early ages would lead us to consider the expedition as more predatory than commercial.

The commerce of the Euxine.

The trade carried on upon the Euxine Sea may be regarded in two points of view; one respecting its own produce and that of the countries bordering on it,—the other, regarding it as a means of conveying the produce of other countries, and particularly that of the Indies, to Europe. Possessing numerous ports, many navigable rivers flow-

to the origin of the name, conjecturing it to have arisen from the cutting up of the tunny-fish, an article of great trade in that sea.

* *Strabo*, lib. 1, ch. xii.

ing into it, abounding with large fish to a degree unknown in other seas, and the countries on its shores supplying timber, pitch, hemp, iron, and provisions—these advantages caused it in early times to be a sea of great naval resort. Both the European and the Asiatic Greeks founded colonies on its shores.

Miletus, the capital of Ionia—the great school ^{Milesian colonies.} for astronomical and nautical instruction, and the principal source whence most of the colonies of antiquity were derived*—founded several cities on the Euxine Sea; on the south, Sinope and Trapezus, to which perhaps Byzantium may be added; on the north, Panticapæum and Theodosia; on the west, Istria and Apollonia. The European Greeks, as well as the Asiatic, founded cities on the same sea. According to Arrian, the whole of the cities on the west coast of the Euxine were Greek colonies. Most of them are mentioned in a former Section.†

The commodities furnishing articles of trade ^{Articles of trade.} by the countries bordering on the Euxine were neither very numerous nor of great value. Honey, wax, hides, provisions of all kinds, and materials for building or rigging ships were the principal articles. It must not be omitted that linen cloth, both white and dyed or painted, was an article of trade from this country to Greece in early times.

* “Super octoginta urbium per cuncta maria genetrix.”—*Plin. Nat. Hist. lib. v. c. 29.*

† Sect. v. p. 59.

The
fisheries.

But the Euxine itself was the main source of supply for their domestic commerce. Both this sea and the Palus Mæotis abounded in fish of a large size.* Tunnies are still caught in the Bosphorus in great quantities, shoals of them pouring through its narrow channel from the Black Sea into the Archipelago and the Mediterranean. Of old, Heraclea, Sinope, and other ports, carried on a great trade in salt fish. The further westward the shoals were taken, the more they were valued. A poetical glutton, cited by Athenæus,† extols as a delicacy the part of the tunny nearest the tail, pickled and broiled, as we do a red herring, and adds that Byzantium is the metropolis of this article of luxury. They were cured in various ways, and Athenæus mentions that a jar of this pickled fish was sold for 300 drachmæ, or about 10*l.* English.

Trade of
the East
by the
Euxine.

But the great advantage which the Euxine possessed, in point of trade, was its serving as a means for conveying the commodities of the East to Europe. This appears to have been the most ancient channel of communication, much prior to that across the Arabian gulf, and that of the Red Sea, with its mart at Alexandria. The route was tedious and circuitous, but the desire of possessing Indian commodities overcame all obstacles. Pliny states that the goods were brought from the interior by a seven days' journey, to the

* Plin. lib. ix. c. 15. xxxii. c. 11. Strab. lib. vii.

† Lib. vii. p. 303.

Icarus, a river of Bactriana which joins the Oxus. This last discharges its waters into the Caspian Sea; crossing which by a land carriage in waggons for five days, the merchandize of the East finally reached the shores of the Euxine by the Phasis, a considerable river which flows into the Euxine, with a large town at its mouth, north of Trebizond, the ancient Trapezus. Trebizond, as before observed, is now the chief mart of the trade with the interior of Asia, for which the Danube and the Black Sea are the natural channels from Central Europe.

The commodities imported were much the same as those now received by the nations of Europe from the East Indies. The fine cotton manufactures of India are mentioned by Herodotus, and repeatedly noticed in Arrian's "Voyage of Nearchus." Their texture was extremely delicate, and they commanded high prices. Pliny mentions pearls, diamonds, emeralds, indigo, the red resin called 'dragon's blood,' and a kind of cochineal. The purple and scarlet dyes were in great request at Rome. Then we find spices—cinnamon, mace, nutmegs, and ginger—drugs and perfumes. There was an extravagant consumption of perfumes, they being burnt to impregnate the air in the vapour baths so much used. Some ivory, of the largest sort, was also brought from India to the shores of the Euxine, but most of it came from Africa.

The Indian trade in early times was carried on

to great disadvantage, as regards its prodigious drain of European money ; but it was extremely lucrative to those engaged in it, many of the commodities being sold at one hundred times their original cost. The conquests of the Mussulmen, an uncommercial race, caused a revolution in the trade with the East ; the communications by the Red Sea and across the Persian Gulf were obstructed, and it reverted in great measure to the route by the Euxine.*

The trade
revived by
the Italian
republics.

In the Middle Ages, this trade and the commerce of the Black Sea were revived and extended by the two rival republics which had long contended for naval supremacy in the Mediterranean, and in the thirteenth and fourteenth centuries became formidable in the Levant. In the decline of the Byzantine empire, Venice, as an auxiliary of its weak princes, had established a separate and fortified quarter at Constantinople, which then became the great market of the world, as the Mediterranean was the channel for all its commerce ; and, America being unknown, and the Cape route to India undiscovered, that of the Indies and the north-east of Asia were its richest and greatest branches.

Power of
the Genoese.

Still more important than the Venetian quarter at Constantinople was the Genoese colony occupying Pera and Galata, *vis-à-vis* the Byzantine

* This notice of the ancient trade of the Euxine is principally compiled from a dissertation annexed by Mr. Falconer to his edition of Arrian's Periplus.

capital. This suburb, given up to the Genoese in return for their aid granted to the Greek emperors, grew rapidly in strength and importance. It was defended by a wall, and afterwards surrounded by a double and triple *enceinte*. Houses sprung up on terraces commanding the Bosphorus, and rivalling the glories of the Byzantine capital. The Genoese were governed by their own magistrates, and had all the attributes of an independent state. Rising to power, they insulted, attacked, and at length became virtually masters of, Constantinople, after supporting the empress, Anne of Savoy, in her struggles for the establishment of her son John Palæologus on the throne of the Comnenes.

From this convenient station Genoa extended her commerce into the Black Sea; but not without a severe struggle with Venice for its supremacy, as the two rival republics had long contended for that of the Mediterranean. The defeat of the Venetian fleet at the battle of the Bosphorus in 1350 secured the ascendancy to the Genoese.

On the south of the Black Sea, Trebizond and Sinope were the principal seats of their trade. The former, enriched by the commerce of the East, had become an imperial city, a descendant of Andronicus, the Comnene, who reigned over a fragment of the Byzantine empire embracing the provinces on the east of the Black Sea, taking his title from Trebizond, his capital. On all its shores

Genoese
colonies.

the Genoese planted new colonies or restored those of early date. Their principal settlement was Caffa, the ancient Theodosia, in the Crimean Peninsula. Every one, now-a-days, has heard of the Genoese castle which towers over the narrow harbour of Balaklava in the same neighbourhood.

We have not been able to discover any historical records of Genoese colonization on the western coast of the Black Sea, but officers of intelligence employed on that coast have told us of ruined fortifications on Cape Kaliakri, which they considered Genoese; and we can hardly imagine that the ancient Greek ports in that neighbourhood, such as Varna and Kustendjie, lying on the seaboard of fertile countries, and enjoying some share of commerce in the worst of times, were not visited by the enterprising Genoese.

Fall of the
Genoese
power and
trade.

For two centuries the Genoese remained undisputed masters of the Black Sea. Their power fell with that of the last of their suzerains who filled the throne of the Great Constantine. Like his, their fall was glorious. During the fatal siege of Constantinople by the Turks, five of their ships defeated and scattered the Ottoman fleet of three hundred sail, extending from shore to shore across the Propontis, and entered the Golden Horn in triumph with supplies and a reinforcement of troops. The succour came too late to save the capital of Eastern Christendom, but the Genoese shared the honours of the desperate but unavail-

Constanti-
nople
taken by
the Turks.

ing defence, and Justiniani, their noble leader, was carried from the walls, pierced by a bullet, just before the last of the Constantines fell nobly in the breach of the ruined ramparts.*

For four centuries the commerce of the Black Sea has been nearly stagnant under Turkish rule, and since the Russian czars extended their frontier to its northern coasts, it has been further circumscribed by their jealous restrictions. Even the Austrian trade, which should be considerable, has languished under the obstruction of the Mouths of the Danube. Of late years, the great export of grain has given increased activity to the commerce with the corn-bearing countries on its western coast; and this will doubtless continue to be the staple of the trade. But nations have succeeded to the mercantile supremacy of the Italian republics, as enterprising as they were, and possessed of greater power and resources than they enjoyed. A free commercial port, such as it could never boast before, will now be founded on the Black Sea, open to all nations, but in management and effect a British port, with almost all the privileges of the old Genoese colonies. May it not, then, be reasonably expected, that the Asiatic, as well as the European coasts, will share the benefits of British enterprise, and the commerce for which

The trade
stagnant.

Its revival
and pros-
pects.

* Our notice of the influence and commerce established by the Italian republics in the East has been assisted by reference to Sismondi's *Republiques Italiennes du moyen age*, vol. vi. p. 82, &c.; Hallam's *Middle Ages*, 1, 306; Gibbon's *Decline and Fall*, &c.

the Euxine has been famous from the earliest ages, revive and be enlarged ?

The "pas-
senger
traffic" by
Kustendjie
railway. In conclusion, we wish to offer a few observa-
tions in connection with "the Passenger Traffic,"
by the proposed Kustendjie railway, a subject
slightly adverted to in our quotation from Messrs.
Liddell and Gordon's Report as well as the
traffic with Central Asia by the Black Sea, dis-
cussed, with historical notices, in the earlier
pages of our present Section.

Travelling
to Con-
stanti-
nople.

Nothing need be added to their statements re-
garding what may be called the "Through
Traffic" from London or Paris, and Vienna, to
Constantinople. The voyage down the Danube
is delightful, and the arrangements of the steam-
boats are excellent. Long ago, Captain Spencer
pointed out, from experience, the comfort and
convenience, in saving of distance and annoy-
ance, of making Kustendjie the point of de-
parture or arrival to or from Constantinople for
travellers by this route. It will also be the
direct line of communication with Constantinople
from Bucharest, the wealthy capital of Wallachia,
improved probably ere long by a line of railway
joining the Company's at Tchernavoda—from
Jassy, the capital of Moldavia, from Galatz and
Ibraila, the chief seats of commerce, and other
populous and flourishing towns in the Princi-
palities, of which Constantinople is the spiritual
as well as temporal metropolis; so that the re-

lations of the Greek inhabitants of Moldo-Wallachia with the imperial city must be multifarious.

All this is obvious, and requires no further comment. Our concluding pages will be devoted to pointing out the attractions of this route to the general traveller seeking amusement or information in new scenes. "Until recently," observes an able reviewer of M. Ubicini's work, on the Roumain Provinces,* "this fertile and populous country, in the very heart of Europe, was almost as much separated from general interest as the steppes of Siberia or the islands of Japan. It has been taken for granted that there was nothing to see in its dirty towns, and nothing to learn from its stupid peasantry. Having no remarkable ruins, it could of course have no history. And many an inquisitive voyager, who would not miss a fragment of Italian antiquity, has steamed comfortably down the Danube, quite unconscious that he was passing the great battle-field of races and religions in Europe—a field on which, for a score of ages, civilization has fought with barbarism, the rough North with the polished South, the Scythian and the Hun with the Celt and the Teuton, the armies of Islam with the armies of the Cross.

Tourists in
the Danu-
bian Pro-
vinces.

The coun-
try little
known.

"If the late war," he continues, "has not improved the condition of these Danubian Provinces, it has at least partially raised the veil that hid

* *North American Review*, Jan. 1857, p. 71.

Attrac-
tions to
tourists.

The
Roumain
people.

them. Tourists of a week or two have got near enough to see Bucharest and Galatz, and to write some generalities about the people, and the exact works of some foreign writers have brought them into notice." In a former Section* we have glanced at the points of view in which the Roumain people may be regarded with an interest worthy to induce the close examination of an intelligent tourist. Though degenerate, they are not unmindful of their proud descent from the Roman colonists of Dacia in the time of Trajan, an idiom of whose language they speak, preserving many of their customs; having "lived," as Gibbon observes, "surrounded by, but not mixed with, barbarians."† Attention has been called to the unique character of the traditions and songs, ceremonies and superstitions, of the Roumain peasants; nor will the ethnologist regard without curiosity some of the other races which he will find intermingled, though not blended, with this primitive people. The success of the measures now in process for establishing the independence of the Principalities, with their administration based on a more popular representation, cannot be regarded without anxiety; and it would be interesting to hear an old Boyard declaiming from the tribune in accents reminding the well-informed traveller of the times of the great republic. After what has been said in

* Sect. VII.

† *Decline and Fall*, chap. xi.

these pages of the beauty of a country so fertile and varied in surface, teeming with rich crops, and producing wines and fruits which rival those of Southern Europe, its attractions to the ordinary tourist need not be dwelt upon. It abounds, also, in remains of those monuments of past ages which are of unfailing interest to all classes of travellers. Respecting them we will adopt the general account given by the reviewer already referred to. After mentioning the few relics of the Dacian age yet existing, he continues :

“ Of the second period, on the contrary, the early years of the vassalage to the empire and the conquerors who subdued it, there are very abundant remains. The course of the Roman roads may be traced in every direction. The fragments of the great bridge of Trajan, the masterpiece of the architect Apollodorus, built in twenty arches of 60 feet span, and 150 in height, may still be discerned on the banks of the Danube. The broken wall of the tower of Severinus, falsely ascribed to the Roman emperor ; the ruins of the citadel of Theodora, built by Justinian, and famous in the long story of the Barbarian wars ; the vestiges of Roman cities at the mouths of Wallachian rivers, from which ruins, coins, and relics are constantly exhumed ; the treasures of art and the columns of temples which have been found on the sites of the old towns of Castra Nova and Caput Bovis ;—all make the banks of the Danube an interesting study to the antiquary.

Beauty of
the coun-
try.

Antiqui-
ties of
Roumania.

“The boast of the Roumanians goes back to this epoch. But the real heroic age of the people dates from the thirteenth century, when the provinces became independent dukedoms. From that date to the present day, no century has been without some famous name in the annals of the Roumain people. . . . The monuments of the age of these native chiefs are ecclesiastical rather than civil. Most of the castles have disappeared. But convents, four, five, or six centuries old, still make a striking feature in the scenery of the country. They occupy the most romantic and commanding sites, and at a little distance might be mistaken for fortresses, into which, indeed, they may easily be changed. Some of them are fine specimens of Byzantine architecture, some contain remarkable frescoes, some are noted as once the prisons of famous men, some guard the tombs of the sacred dead.”

Works to
be con-
sulted.

Many of the Wallachian relics of antiquities of the Roman period are figured and described in the Commentary and History of Fabretti and Alfonso Ciacono, the Spaniard, already quoted. But the best authority is Count Aloysio Marsili's magnificent volumes devoted to the delineation of the Roman remains on the Pannonico-Mysian portion of the Danube.* The work, however, is incomplete, the Count's labours having terminated at a point which leaves the neighbourhood of the Lower Danube still open to original research.

Researches
still
wanted.

* *Danubius Pannonico-Mysius* ; 2 vols. folio. Hague, 1726.

There, not to mention other places, we find Rassoza, the ancient *Axiopolis*, and Hirsoza, the ancient *Carsium*; both in the immediate neighbourhood of our own Kustendjie, the abundant relics of antiquity surrounding which have been already adverted to.

We have found good reason to suppose that Tomos, the place of Ovid's banishment, was immediately contiguous to, or almost identical, with Kustendjie;* and it would be interesting to ascertain its exact site. Tomos, or Tomi, appears to have been a more considerable place in the time of the Byzantine emperors, and even much earlier, than it was when Ovid plaintively depicted its miseries, or Strabo described it as *πολιχνίον*, "a small town." Perhaps it became more considerable after the removal of the imperial seat to Constantinople, from its neighbourhood to the capital. But Pliny calls Istriopolis, Tomi, and Callatis—famous cities (*pulcherrimas urbes*) in his time; and on a medal of Caracalla there is this inscription, ΜΕΤΡΟΠ ΠΟΝΤΟΥ ΤΟΜΕΩC.† Tomos, then, had the privilege of a mint, and Goltzius has

Tomos
near
Kustend-
jie.

Its ancient
history.

* See before, p. 59. Our conjecture is confirmed by the description in Ferrarius, which we have since consulted, "Tomi, urbs Mysiæ Infer., in orâ maris Euxini, Odyssæ proxima, inter Callatiam ad m. 30 et Istriopoli ad Bor. 36." To which his editor adds: [Tomis seu Tomi, urbs Mœs. Inf. nunc Babia dicitur a Turcis; *estque etiamnum munita, et cum portu percapaci in orâ Ponti Euxini, et in Bulgaricæ regione.*] We know of no port on the Bulgarian coast between Istriopolis and Callatis which so exactly answers the part of the description printed in Italics.

† See the *Dict. Geograph.* of La Martinière.

preserved a coin struck there, figuring the head of a young man with a laurel crown and a lyre in his hand, probably representing Ovid.* Hierocles calls it the Metropolis of Scythia.† It is so described by Sozomen,‡ the Ecclesiastical Historian, who says that all the cities of the province were entrusted to the charge of its bishop. Towards the close of the fourth century, St. Bretannion was raised to the see of Tomos by the emperor Valens. He was probably succeeded in his bishopric by St. Theotenes, a Greek philosopher, who flourished during the reigns of Theodosius and Arcadius. In the Pottinger tables, Tomos has all the marks of a great city, and, so late as the reign of Constantine Porphyrogenitus,§ that

* Goltzius, *De re nummariâ antiquâ*.

† Wesselingi *Commentarius in Hieroclem*, 391. 4.

‡ Sozomen, *Eccles. Hist.* 6. 21. ix. 47.

§ Constantine Porphyrogen. *de Thematibus Europæ*, vol. iii., p. 47 (Bekker).—It would be interesting to read Ovid's *Tristia*, and his *Epistles ex Ponto*, on the spot where they were written. They abound in pathetic lamentations on the barbarism of the Scythian tribes with which he was surrounded; but though he often mentions the Greek colonies on the coast, in one of which he lived, while he perpetually dwells on the dark side of the picture, we look in vain for any traces of the civilization which must have been preserved in the towns. The situation of affairs was this: the Greek colonies on the western coast of the Euxine, including Tomos and Kustendjie (whatever was its more ancient name, which in another place we have conjectured to have been *Naxos-apud-Tomam*), had passed under the dominion of the Romans, with the province of Mœsia, comprising the present Bulgaria; the kingdom of Dacia still subsisting in great strength beyond the Danube. But the frontier province of Mœsia was infested by predatory tribes, called by Ovid, indiscriminately, Sarmatians, Getes, and Scythians, partly native, but mostly making inroads from the north, particularly when the Danube

emperor, in his scheme of the provinces, places Tomos at the head of the fourteen cities subject to the præfect of Mœsia. It should be mentioned that *Constantiana* was another.

was frozen over, and probably by way of the Dobrudscha, as the Cossacks have done in recent years. They were often repelled by the Roman armies and garrisons, but no safety existed beyond the ramparts of the town.

We must not swell our note with quotations from the poet's descriptions, graphic as they are, of this rude cavalry, sweeping over the plains, fierce as wolves, clothed in flowing goat-skin mantles, with long beards and dishevelled locks, and armed with bows and poisoned spears and arrows; specimens of which he sends to the museum of a friend at Rome. Ovid complains that against the fierce attacks of these barbarians he was himself compelled, although no soldier, to take arms. Of their culture he says that their tongue was intermingled with Greek, but they knew no word of Latin, and that their country wealth consisted of sheep, oxen, wains, and some poor household stuff.

The poet's complaints of the rigour of the climate are not unnatural; but he would have us to suppose that perpetual winter reigned, and that there was scarcely any cultivation, or even vegetation, on a coast which we know enjoys, in summer and autumn, the climate of his own Italy.

In truth, the poet vented his spleen against the place of his exile, painting it in the darkest colours, just as the philosopher Seneca afterwards maligned Corsica, when banished there by the emperor Claudius, under somewhat similar circumstances. Seneca, too, lived in a Græco-Roman colony; and his island-prison, so far from meriting the character he gives it, was called by the Greeks *Kalliste*, from the charms of its climate and verdure. That this is its true natural character, we can ourselves vouch from extensive rambles through the island, an account of which is now in the press.

As to these Roman exiles, the fact is, that to them existence was insufferable out of brilliant Rome and the sunshine of imperial smiles; the re-admission to which they implored by the most abject flattery. Ovid sums up his pitiable case in one line—

Quid melius Româ, Scythico quid frigore pejus!

Ex. Ponto, l. 3. 37.

Searches
proposed
from Kus-
tendjie.

Ruins of
the Greek
colonies.

Antiqui-
ties found
on Ser-
pents'
Island.

These antiquities, with Trajan's Wall, lend some interest to Kustendjie and its immediate neighbourhood; and such researches might be pursued by the traveller from that place, with great advantage, among the sites of the ancient Greek colonies along the coast;—*Istriopolis*, north of Kustendjie, and, south of it, *Callitis* or *Callantra* (perhaps *Mangalia*), *Tetrisias Acra*, on Cape Kaliakri (the *Tiristria Prom.* of Pliny), *Byzous* and *Zyras* in the same neighbourhood, and *Dionysopolis* or *Odyssus*, which dispute the site of the present Varna.

An excursion of seven or eight leagues from Kustendjie would land the curious traveller on the far-famed Isle of Serpents, giving him an opportunity of viewing without risk the principal mouths of the Danube, as well as of exploring the antiquities of the sacred island of Achilles. The great traveller, Dr. Clarke, predicted that some interesting remains of antiquity might be found on the island; which he supposed would, from its seclusion, have escaped the ravages whereto almost every other portion of classical monuments has been exposed; no traveller having been then known to have ventured on it.

Dr. Clarke's conjecture is now proved to have been well founded. During Captain Spratt's survey of the Mouths of the Danube in Her Majesty's ship *Medina*, he landed on Serpent Island, and discovered some remains of antiquity, an account of which, extracted from his Report, will be found

in a note subjoined.* The havoc described by Captain Spratt was probably the work of the

* "The north-eastern angle of Serpent Island is prolonged into a small level promontory, about half the greatest elevation of the island.

"This little promontory has a landing-place on either side of its neck, on a beach of large shingle, with a road or way cut through the cliff or bank on the north side, which cut or way may have served as a slip to haul up light-draught vessels in; but on the south side, where the landing is better, there are remains of a terraced road, formed of rude blocks, which are of a Cyclopean style, and evidently of a very early date.

"On reaching the top of this promontory, the interest in its antiquarian association is more fully awakened on seeing its surface almost composed of fragments of ancient pottery, pieces of vases, patera and amphoræ lying in great profusion; and the ground in such a condition as to show that, not many years since, the entire surface has been dug over in search of these and other relics. But the pottery appears to have been wantonly destroyed, as being little appreciated in a search that was most likely made for articles of more intrinsic value, coins, &c.

"After a little search amongst the heaps of pottery, I found several fragments with parts of Greek inscriptions upon them, which had been both stamped when the clay was soft, and also scratched on the surface after it was hard and painted. Some of the paintings were in black, and others in red, being figures of animals and ornamental designs, but none entire, yet forming parts of very elegant vases and patera when perfect, and indicating a very early occupation of the island. There were fragments of glass and brazen vessels also among the heaps of broken pottery.

"The handles of large jars, apparently for water, were so plentiful, that they indicated the existence of a small settlement on this little promontory, as well as its having vestiges of buildings, but none of the character of a temple, which must have stood on the summit of the island, where are still lying several squared blocks of marble, four and five feet in length, one of which had some illegible characters; and two or three others, which had rude mouldings, seemed to have formed the slabs of a small pediment, and are, I think, vestiges of the temple of Achilles.

"On the western part of the island there are also more evidences of the very early occupation of the island, the surface

Russians left in charge of the lighthouse before the late war ; as Dr. Clarke informs us that the stories told of the island prevented mariners from landing. We are inclined to doubt its ever having been inhabited and cultivated in early times, as Captain Spratt supposes. The superstition attached to its sacred character, and the assertion of Arrian, forbid our entertaining the idea ; and still more we should question its having been a depôt for trade, of which we should have found some record in early writers. The vestiges of human habitation found on the island by Captain Spratt may have been connected with the casual visits of the ancient Greek mariners to pay their devotions to the Genius of the place.

It would be desirable that this “enchanted

being intersected with the foundations of long walls formed of rude blocks, that are no doubt ancient, and seem to have formed divisions of property when it was entirely cultivated ; for the surface of the island is for the most part formed of a rich black earth, two and three feet deep. There are also two or three evidences of detached buildings of the same character, and three very ancient wells.”

Captain Spratt considers that “these remains evidently indicate an occupation of the island at the earlier periods of Greek history, and lead to the idea that it may have been occupied as a trading depôt by some Hellenic community that traded with the Danube, and the adjacent low country ; the distance from the coast rendering it safe from the insalubrity of the marshy Delta, and from molestation of the natives ; for it is by nature almost formed into an impregnable sea-fortress for such a depôt ; and by its elevation was a beacon or land-fall for the adjacent coast to the bold navigator seeking for it in those days.”—*Remarks on Fido-Nisi, or Serpent Island*, annexed to Captain Spratt's Report, pp. 15, 16.

island" should be visited by some person competent to form an exact idea of the age of its antiquities, and to decipher the inscriptions on any of its remaining monuments; particularly if any of the verses mentioned in Arrian's account to be inscribed to the memory of Achilles and Patroclus can yet be found.

Such remains, and others which might be discovered by researches in the ruins of the Greek and Roman colonies of Eastern Bulgaria, would find a fitting depository in a museum to be established at Kustendjie; and we would suggest that the overseers of the intended works at that place should have directions to preserve with care all such vestiges of antiquity, in sculpture, coins, urns, gems, &c., as may be found in the cuttings and excavations, to form the nucleus of a collection which may throw light on the rather obscure history of this country in ancient times.

With the advantages of its position, and an influx of shipping of all nations, with the accommodations that will spring up, and the temptations offered by the society of persons of so superior and intelligent a class as that of which the directors and managers of an undertaking of such magnitude in a foreign country must necessarily consist—the English colony of Kustendjie may naturally become a pleasant resting-place, where the traveller will halt to refresh himself after his fatigues, and prepare for further enterprises. Soon, we venture to predict, will the sunny slopes of the

A museum
of antiqui-
ties.

Kustendjie
may be-
come
attractive.

hills be overspread with gardens and vineyards, the environs of the town embowered in groves of fruit trees, and its mud hovels give place to the neat cottages of the workmen in the Company's employ, the comfortable homes of their principal officers, and the public buildings required by the traffic of all kinds.

Excursions from.

Thence the traveller may pursue to advantage the historical researches just indicated; or the more enterprising may adventure wilder excursions into the heart of Eastern Bulgaria, a country which, according to the account of Colonel Biddulph, a traveller of some experience, offers great variety of scenery—deep forests, valleys rich with corn, scattered and secluded villages, and vast undulating pastures on which the Bulgarian herdsman and shepherd leads a nomad life.

Settlers wanted.

Some of the visitors to Kustendjie returning home, may carry with them such accounts of the country as may induce their friends or acquaintance to join the English colony, and invest their capital in corn- and sheep-farming in the deep-soiled valleys, and on the healthy downs of the Dobrudscha; a result much to be desired for the common benefit of all concerned.

Tourists to the N.W. of Asia by Kustendjie.

Some travellers may make Kustendjie the point of departure for Constantinople; a few be tempted to cross the Black Sea to the once imperial Trebizond, whence they may easily make excursions to the sources of the Tigris and Euphrates, or, in a journey not longer than that from London to Mar-

seilles or Milan—but of course occupying more time—visit Erzeroum,—Kars (a place for ever famous),—Erivan, and even Tehran, the northern capital of Persia, on the shores of the Caspian Sea. All this may be accomplished with ease in the course of a long autumnal vacation ;—the European part of the tour in a month or six weeks. And, now that all the old continental routes are “ used up,” may not some part of the perennial stream of travel be turned into fresh fields offering many attractions, and, considering the distance from point to point, unequalled facilities of access ?

Reasonable as some, at least, of these anticipa-
 tions are, we would wish it to be clearly under-
 stood that the success of the Port and Railway
 Company does not in the slightest degree depend
 upon their being realized. Such anticipations,
 with hopeful views of the social and political
 benefits the undertaking is calculated to confer,
 may give a moral interest to the enterprise, and
 serve to enliven pages which have had to deal
 largely in the statistics of trade and engineering
 details. But the calculations of revenue rest on
 the solid basis of an export of corn, which, we think,
 it has been proved the country now produces, or
 is easily capable of producing, with a constant and
 growing demand for the produce ; and on the
 attraction of a certain portion of the trade to the
 proposed railway and improved harbour, which
 no one, we apprehend, will consider unreasonable.

True basis
 of its pros-
 perity,

Conclu-
sion.

For the rest, it may be inferred, from all that has been collected in the pages of this Memoir, that Kustendjie was not in former times, nor is destined long to remain "the God-deserted place"—to use the phrase of one of the earliest promoters of the project for its renovation—of which it presented the aspect, when attention was first called to its natural advantages of a fine site and commanding position.

THE END.

APPENDIX.

TERMS OF THE CONCESSION,
BY THE IMPERIAL OTTOMAN GOVERNMENT,
OF THE
DANUBE AND BLACK SEA RAILWAY,
BETWEEN BOGHAZ-KEUI (TCHERNAVODA) AND KUSTENDJIE.
(Translated from the Original.)

CONVENTION RELATING TO THE RAILWAY FROM THE DANUBE,
AT OR NEAR BOGHAZ-KEUI, TO THE BLACK SEA, AT OR NEAR
KUSTENDJIE; THE YEAR OF THE HEGIRA 1273, CORRESPOND-
ING WITH THE YEAR 1857 :—

BETWEEN their Excellencies, the Minister for Foreign Affairs, the Minister of Finance, and the Minister of Commerce and Public Works, acting for the Government of His Imperial Majesty, the Sultan, *on the one part*;—and Mr. J. Trevor Barkley, representing Messrs. Thomas Wilson, Cunard, Price, Paget, Lewis, and Newall, founders of the Company, specially authorised by a legal act of procuration, bearing date the 6th March, 1857, and deposited with the Imperial Minister of Finance; the said J. T. Barkley acting in virtue of the full powers conferred on him in all that concerns the said Railway, *on the other part*.

IT HAS BEEN AGREED AS FOLLOWS :—

ART. 1.

The Government of His Imperial Majesty, the Sultan, concedes, on the conditions hereafter stated, to the Company before mentioned the Railroad from Boghas-keui on the Danube to Kustendjie on the Black Sea.

The Government also engages not to concede any other Railway or Canal between the Danube and Kustendjie, without having first obtained the consent of the said Company.

The duration of the Concession shall be for ninety-nine years, dating from the day when the Railway shall be opened for traffic.

ART. 2.

The Company will bear the title of the "Imperial Ottoman Danube and Black Sea Railway Company," and will be placed under the high surveillance of the Sublime Porte, in order that the principles of the Concession and the general laws of the Empire may be maintained and respected.

ART. 3.

The Company pledges itself to submit to the judgment, the approbation, and the acceptance of the Imperial Government, the plan of the Railway in detail from one end to the other, within a period which shall not exceed three months from the date of the Firman of Concession, or sooner if possible.

ART. 4.

The Company binds itself to execute, for the present, the permanent works and earth works required for a single line of rail, and also undertakes to construct a second, when the traffic becomes developed and the necessity of a double line is shown by the increase of business, and the insufficiency of a single line.

ART. 5.

The Company is authorised to erect at the termini of the Railway, that is to say at Kustendjie and at Boghas-keui, and also at the various stations, the constructions which are indispensable for the service and working of the Railway in the most advantageous manner, and for facilitating the transport of passengers and merchandise.

The Company is also authorised to construct at the stations of Kustendjie on the Black Sea, and Boghas-Keui on the Danube, special quays with their appurtenances, at which, exclusively, all merchandise passing over the Railway shall be loaded and discharged; but all these constructions must be erected within the limits strictly required for the service of the said Railway.

The Government, on its part, may station Officers of the Customs on the quays of the Railway, and everywhere else where it shall consider they are necessary to verify the merchandise carried by the Company, and enforce the Customs' regulations, without the merchandise being afterwards required to pass through the Custom-house:—it being clearly understood that, with the exception of the Customs' duties determined by this Article, the Railway and all its appurtenances will be exempted from every tax, impost, or charge whatsoever, during the duration of the Concession.

On condition that the Imperial Government is subjected to no loss or injury in the receipt of its Customs' duties, merchandise which, not coming from Anatolia, Roumelia, Wallachia, Moldavia, Servia, or any other province of the Empire, comes directly from Foreign Countries for transit to other Foreign Countries, can pass over this Railway sealed beforehand in lead by the Customs' Officers, without paying Customs' duties. But merchandise which, having passed in transit, is sold in the Ottoman territory, or which is passed in contraband, will be subject to the Customs' duties, in accordance with the tariff and regulations of the Customs applicable in such cases.

Merchandise which, coming from Wallachia, Moldavia, Servia, Roumelia, Anatolia, or any other province of the Ottoman Empire, passes over this Railway for exportation to Foreign Countries, will be treated, in all that relates to Customs' duties, in conformity with the regulations decreed and in force in each one of those provinces.

The Company undertakes to provide at its own cost, special offices for the Customs' Officers, and to reserve separate apart-

ments for the use of the Commissioners and other officials necessarily employed at the landing stages, and also the stations, where required, of the Railway.

ART. 6.

The Company undertakes, unless prevented by insurmountable obstacles, to execute at its own cost, risk, and peril, all the works of the Railway, in such manner that the main line of Railway be fit for use and working throughout at the expiration of three years from the date of the Firman of Concession.

ART. 7.

The Railway, in crossing public roads and watercourses, must pass either over or under the said roads and watercourses, by means either of bridges or tunnels; but this rule does not apply to the lakes on the line of the Railway.

The Company is also authorised to make level crossings, and to divert roads and watercourses by the side of the Railway, provided that it obtains beforehand the consent of the Imperial Government, and that no injury is inflicted on the inhabitants or the country by these works; but in ordinary cases level crossings will be only allowed for bye-roads, and not for those which are much frequented.

The Company engages to abstain, under any circumstances, from destroying buildings devoted to religious worship.

ART. 8.

The Telegraph wires placed by the Company along the line of railway shall be used exclusively for the service of the Railway.

ART. 9.

All land belonging to the State, and not granted by it to private persons, which shall be considered indispensable for the construction of the Railway or of its stations, warehouses, *entre-*

pôts, and offices, and also for the residences of the servants of the Company, will be given gratuitously to the Company, on leasehold title, for the period of the Concession.

ART. 10.

Lands of the class belonging to private persons are to be bought and paid for by the Company, under the law of expropriation for objects of public utility in the Ottoman Empire.

Besides the value of the land, that of any buildings or trees upon it must be estimated, and paid by the Company to the owners.

After the plan of the Railway has been made, the Government will send to the spot Commissioners and Engineers, to deliver to the Company on lease, rent free, the lands of the State which the Railway is to pass through, and, at the same time, to make arrangements for the purchase by the Company, under the law of expropriation for public objects, of the lands belonging to private persons situated on the line of the Railway.

In the Commission named by the Government the Company will be represented by a delegate.

This Commission shall finish its labours in three months from the day when the plan of the Railway is submitted to the Imperial Government. The awards of this Commission, after being sanctioned by the Imperial Government, shall be immediately enforced by the Governor-General of the province.

ART. 11.

The Company is authorised during the Concession, to cut, at its own cost, in the forests of the State within thirty miles on each side of the Railway, whatever timber is required for the construction of the Railway, without paying for the same; and in like manner, within the same limits, to take from the State quarries, whatever stone is necessary for the works of the Railway and its appurtenances.

But the Company cannot, under any circumstances, cut in the

State forests, trees, the timber of which is reserved for the Imperial Arsenal.

If the Company wishes to cut timber in forests belonging to private persons, or work stone in quarries which are private property, it must pay for the said material in accordance with agreements previously made with the proprietors.

ART. 12.

The construction of the Railway will be superintended by a Commissioner of the Imperial Government, who, acting in accordance with his instructions, will see to the proper execution of all the works, so as to ensure their being carried out and finished in perfect order, and with the requisite solidity; but this Commissioner cannot interfere in any way with the administration of the Company's affairs.

The monthly salary of this Commissioner will be paid by the Imperial Government, but his expenses on the spot will be defrayed by the Company.

ART. 13.

At the expiration of the ninety-nine years of the Concession, the Imperial Government will enter into gratuitous possession of the Railway, which the Company must hand over in working order, and of the bridges and passenger stations of the said Railway, also in perfect working order.

On the other hand, the houses, warehouses, *entrepôts*, repairing shops, together with the rolling stock of the said Railway, such as locomotives, steam-engines, passenger and goods carriages, and tools and instruments then on hand in the workshops, and elsewhere, intended for repairing and working the Railway, shall be valued by a mixed commission, named by both parties, and purchased by the Imperial Government at the price thus fixed. All the articles which appear to the commissioners superfluous, will be rejected by the Government.

ART. 14.

The Company is authorised to raise by the issue of shares, the capital necessary for the construction of the Railway and its appurtenances.

The Company engages to reserve a sixth of the said shares for subjects of the Sublime Porte, at the same rate and under the same conditions as for the other subscribers.

The portion of the shares reserved for Ottoman subjects which is not subscribed within one month from the date of the Firman of Concession will be placed at the disposal of the Company.

ART. 15.

The Company is authorised, until the completion of the works of the Railway, to import, free of Customs' duties, or any other impost whatever, all the materials required exclusively for the construction of the Railway, and its appurtenances: it being clearly understood that preference ought to be given to the produce of Turkey.

The Imperial Government also exempts the Company, during ten years from the date of the Firman of Concession, from the payment of all Customs' duties and other imposts on all the materials, such as steam-engines, locomotives, rails, tools, repairing and working instruments, and coal and coke, required for repairing and working the Railway.

If the Company imports materials in excess of the quantity which appears reasonably necessary for the service of the Railway, these materials will be seized as if they were contraband, and will be subjected to the Customs' law applicable in such cases.

ART. 16.

The Company is required, within two months after the Firman is delivered, to draw up its statutes, fix the general tariff, prepare the details of its executive administration, and also make

special regulations, having for their object the security of the lives and property of the passengers, and the careful preservation of the merchandise throughout the whole extent of the Railway.

These statutes, with the general tariff and special regulations, shall be drawn up in the customary form, and be submitted, within the period aforesaid, for the consent and approval of the Imperial Government; and be put in execution after receiving the sanction of His Imperial Majesty the Sultan, which will be given within six months from the date of the Firman.

The tariff cannot be increased without the consent of the Imperial Government.

With reference to this Article, as well as all the others, any dispute which may arise, during the term of the Concession, between the Government and the Company, and *vice versâ*, shall be judged and settled by the means specified in the following Article (17).

The Company, in its corporate capacity, is subject to the laws, present and future, of the Ottoman Empire; but every *employé* of the Company will individually enjoy the protection of his nation. Nevertheless, if among the *employés* of the Company, any person is found disturbing the public tranquillity, or exciting the people against the Government, the Imperial Government will treat with the Company on the subject, and persons of this description will be immediately expelled from the Ottoman territory.

ART. 16.

Every difference between the Imperial Government and the Company, or between the Company and the Government, which may occur during the Concession, shall be judged and decided by a mixed commission, composed of arbitrators named in equal numbers by each party.

The judgment of these arbitrators will be without appeal, and, in case of an equal division of votes, an Umpire shall be elected by the commissioners themselves.

ART. 18.

The Company undertakes to transmit gratuitously the despatches of the State, whether by train or by telegraph, and also, for a small sum, which shall be fixed by a mixed commission, to carry the mails containing private letters, prepaid at the Imperial posts.

Specie and *matériel* of war, being strictly the property of the State, shall be conveyed at a rate equal to one-half of the general tariff, and soldiers at one-third of the fare of third-class passengers.

The Company undertakes to reserve in the train, once, and, if necessary, twice per day, a compartment for the mails of the Imperial Post, and a proper place for the agent in charge of them.

If it be proposed to construct branches from the Railway, or public roads of the ordinary class leading from the main line of Railway, within a radius of thirty English miles therefrom;—or if a branch-line, or extension of the main line of Railway, to Silistria shall be contemplated, the Company, if it accepts the terms and conditions offered by other parties, shall obtain the preference over all others, during the term of the Concession.

ART. 19.

The existence of a Port in the Black Sea, that is to say at Kustendjie, being absolutely necessary in order to allow of the profitable working of this Railway, the Company will be authorised to construct and finish this Port conjointly with the Railway, in accordance with the plans which have been already submitted to the Imperial Government, and the conditions which will be ultimately settled between the Sublime Porte and the said Company.

ART. 20.

When the Imperial Firman is handed over, the Company will lodge in the Imperial Treasury as caution-money, calculating at

the rate of two per cent. on the capital set aside for the construction of the Railway, six thousand pounds sterling (£6,000) in *coupons* of the Ottoman loans in circulation in Europe.

In case Messrs. Cunard, Price, Paget, Newall, and Lewis, the Directors of the Company aforesaid, should not produce within three months from the date of the Firman, a legal and authentic document clearly setting forth the definite formation of the Company; or, further, in case that within four months from the date of the aforesaid Firman, the statutes of the Company be not submitted to the approval and acceptance of the Sublime Porte; or, lastly, in case the works of the Railway be not commenced within nine months from the date of the aforesaid Firman—the present convention will be considered as null and void; the Company will forfeit all its rights, and the Imperial Government will be at liberty to grant to others the Concession of this Railway; and the entire caution-money be confiscated, to the profit of the Imperial Treasury.

On the other hand, if the Company fulfils its engagements, the said caution-money will be returned to the Company at the end of three years from the date of the Firman; and, meanwhile, the Company shall receive interest for the same until the end of that period.

PORT CONCESSION.

CONVENTION relative to the Port of KUSTENDJIE, attached to the Convention of the Imperial Ottoman Railway of the Danube and the Black Sea, in accordance with the stipulation laid down in ART. 19 of that Convention.

ART. 1.

The Imperial Ottoman Government accords to the said Company the right to construct, at its own proper cost, risk, and peril, the said Port of Kustendjie and its dependencies, quays, magazines, entrepôts, &c., according to the plans and designs of the said Company, which will be presented to the Imperial Ottoman Government within three months from the date of the Railway Firman.

On presentation of the plans by the Company, the buildings, quays, entrepôts, and magazines required for the exclusive uses of the Company will be determined, and Engineers will be sent up by the Imperial Ottoman Government to ascertain the position of the Port, in conjunction with the Company's Engineers.

The necessities of the trade and "circulation" requiring it, the Port and its dependencies will be enlarged by the Company, with the consent of the Government.

ART. 2.

The ownership of the said Port, and of the land necessary for the dependencies and works of the same, will rest always with the Ottoman Government; but His Majesty the Sultan, in his quality of Lord of the Soil, accords "en ferme" the exclusive enjoyment of them to the Company aforesaid, for the

same period as the Railway (that is to say for ninety-nine years from the opening of the said Railway—*Vide* ART. 1 of Railway Convention), “à titre de bail gratuit,” for the uses of the Company.

ART. 3.

This Convention of the Port of Kustendjie is subject to the same conditions, privileges, and duties, &c., which are already stipulated in the Railway Convention aforesaid; and the Imperial Ottoman Government will enter on possession of the said Port simultaneously with the Railway, according to the stipulations which are already determined by ART. 13 of the Railway Convention.

ART. 4.

The tariff fixing the light, anchorage, and other duties to be received by the Company in the new Port during the period of its occupation by the Company, as well as the statutes and rules of the said Port, before being put in force will be submitted to the Imperial Ottoman Government within two months from the date of the Railway Firman, and, if found to be not contrary to the existing laws and regulations of the Empire, permission to enforce them will be granted to the Company.

It is nevertheless expressly stipulated that these duties shall be the same for all nations, and that no favour nor advantage shall ever be accorded to any of them exclusively.

ART. 5.

The police (or government) of the town and the port, and the power of visiting ships which enter there, will be in the hands of the *employés* of the Imperial Government.

ART. 6.

In case of absolute necessity the Imperial Government can establish on the land conceded to the Company such fortifications as may be rendered necessary by the occasion.

**DANUBE AND BLACK SEA RAILWAY AND
KUSTENDJIE HARBOUR COMPANY
(Limited).**

*Incorporated July 30, 1857, under the Joint Stock Companies'
Acts.*

CAPITAL £300,000,
**In 3,000 Shares of £100 each, with power to increase
to £500,000.**

DIRECTORS.

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